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ENVIRONMENTAL IMPACT ANALYSIS PROCESS. DRAFT ENVIRONMENTAL IMPA--ETC(U)  
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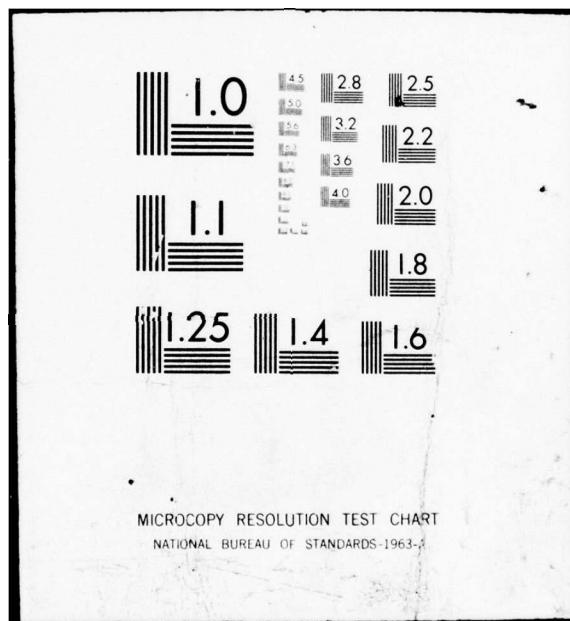
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IMPORTANT

NOTE TO READERS

THIS STATEMENT IS ORGANIZED TO FACILITATE EASE IN MOVING FROM GENERAL OR SUMMARIZED INFORMATION TO SPECIFIC AND DETAILED INFORMATION. THE STATEMENT IS THE AIR FORCE'S REPORT TO PROVIDE VISIBILITY AND QUANTIFICATION, WHERE POSSIBLE, OF THE ISSUES. THE ANNEXES OR BACKGROUND STUDIES LISTED IN THE BIBLIOGRAPHY PROVIDE DETAILED INFORMATION AND BASELINE DATA USED IN THE PREPARATION OF THE STATEMENT. TO INSURE COMPLETENESS OF THE DATA GATHERING PROCESS, CONTRACTOR STUDIES WERE COMPLETED FOR BASES OTHER THAN THE CANDIDATE, WHERE THOSE BASES WERE SCRUTINIZED MORE CLOSELY IN THE EXAMINATION OF POSSIBLE ALTERNATIVES. THE SUMMARY SHEET AND TABLE OF CONTENTS SHOULD BE CAREFULLY REVIEWED BEFORE PROCEEDING THROUGH THE STATEMENT. IMMEDIATELY FOLLOWING THE TABLE OF CONTENTS IS A GLOSSARY AND THE STANDARD AIR FORCE ENVIRONMENTAL REFERENCING NUMBER SYSTEM (AFERN) USED IN THIS STATEMENT AND SCIFNTIFIC STUDIES SHOWN IN CHAPTER X BIBLIOGRAPHICAL REFERENCES,

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SUMMARY SHEET  
DRAFT ENVIRONMENTAL STATEMENT

CANDIDATE ACTION FOR THE CLOSURE OF  
KINCHELOE AIR FORCE BASE, MICHIGAN  
Administrative Action

CONTACT FOR COMMENTS

This statement was prepared by the United States Air Force. Dr. Billy Welch, Special Assistant for Environmental Quality, Office of the Secretary of the Air Force (SAF/ILE), Washington, D.C. 20330, telephone number (202) 697-9297, should be contacted for additional information about the candidate action. Any comments concerning this candidate action should also be addressed to Dr. Welch.

DESCRIPTION SUMMARY

The imperative need to manage the resources of the Air Force with less while maintaining the combat capability of its forces has led to a renewed review of all base operating functions, activities and installations. The Congress has also recognized this need and has mandated reductions in headquarters and support manpower. In this regard, the USAF has determined that the following candidate action would reduce excess capability and result in substantial resource savings without detriment to combat capability, and that this candidate action merits detailed study. The action is to: inactivate the 449th Bombardment Wing and its supporting organizations, close Kincheloe AFB MI by end of FY 77 and declare the base excess to Air Force requirements. The 16 B-52H aircraft would be relocated, 14 to Ellsworth AFB SD and 2 to K.I. Sawyer AFB MI. The 16 KC-135 aircraft assigned to Kincheloe AFB would be relocated and transferred to the Air Reserve Forces. The FY 4/77 Kincheloe manpower authorizations of approximately 2700 military and 750 civilian positions\* would be eliminated. Approximately 320 caretaker manpower positions, which would be retained after the initial reduction, would be eliminated upon completion of base disposal. The relocation of aircraft would result in a net increase of 190 military authorizations at Ellsworth AFB and 110 military authorizations at K.I. Sawyer AFB. Current aircraft operations at Kincheloe generate a total of approximately 2,070 takeoffs, landings, and low approaches monthly. Aircraft operations at Kincheloe would be reduced to zero.

ENVIRONMENTAL EFFECTS SUMMARY

Kincheloe Air Force Base Area: As a result of a base closure, the natural environment should improve as a result of the termination.

\*The 750 civilians includes an estimate of contractor, Army/Air Force exchange service and non-appropriated fund manpower as well as in-service authorizations.

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of airport operations. The socio-economic impacts, however, could be severe in the areas of unemployment, housing vacancy, school enrollments, and funding. Mitigating measures such as the President's Economic Adjustment Committee (EAC) are available to affected communities. For a more detailed summary and specific quantification of impacts in the Kincheloe area, please turn to page 17, Chapter III, PROBABLE IMPACT OF THE PROPOSED ACTION IN THE ENVIRONMENT.

Ellsworth Air Force Base Area: The impacts resulting from 14 additional B-52 aircraft would consist of adverse effects on schools and housing (over-crowding) and minor increases in noise and air pollution. It should be noted that, due to other realignment actions, Ellsworth AFB would receive a net increase of only six aircraft.

K.I. Sawyer Air Force Base Area: The impacts resulting from the two additional B-52 aircraft would be minor except for a serious impact in the housing area due to a critical shortage. Due to other realignment actions, K.I. Sawyer will receive a net increase of three aircraft (+ four B-52, -one KC-135).

#### ALTERNATIVES SUMMARY

Alternative No. 1: Relocate active forces presently assigned to Wurtsmith AFB and close the base by end FY 77.

Alternative No. 2: Relocate active forces presently assigned to Blytheville AFB and close the base by end FY 77.

Alternative No. 3: No action or status quo.

NOTE: This DEIS was made available to the Council on Environmental Quality and the public in September 1976.

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## DISTRIBUTION OF THE DRAFT ENVIRONMENTAL STATEMENT

Copies of the Draft Environmental Statement (DES) have been provided for review and comment to the individuals, organizations and public agencies listed below. Other people wishing to comment on this DES may obtain copies by writing to the information officers at either Kincheloe AFB, Wurtsmith AFB, or Blytheville AFB; their addresses are:

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379BMW/OI  
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## GLOSSARY

Air Installation Compatible Use Zoning (AICUZ) -

A Department of Defense Program designed to prevent the degradation of mission capability due to encroachment and to protect local citizens from noise and accident hazards associated with flying activities.

Air Reserve Forces -

All units, organizations, and members of the Air National Guard of the United States and the United States Air Force Reserve.

EWO - (Emergency War Order)

The order issued by competent authority to launch combat-ready weapon systems maintained in readiness for or generated for wartime strike operations.

Fiscal Year (FY) -

Twelve month period selected for accounting purposes. The fiscal year is designated by the calendar year in which it ends. FY 77 begins 1 October 1976 and ends 30 September 1977.

MCP - (Military Construction Program)

Those funds appropriated by Congress and accruing to the DOD, utilized to construct real property facilities and provide real property installed equipment in support of the stationing of US forces and the maintenance of weapon systems.

NOA - (Non-Operating Active)

An allowance of aircraft over and above the authorized unit equipment to permit heavy maintenance, modifications, and inspect and repair as necessary without reduction of numbers of units available for operations. The normal allowance is ten percent of unit equipment for combat systems, five percent for trainers, and two percent for support aircraft. No funds, manpower, or flying hours are allocated for these aircraft in the Air Force budget. Included are other aircraft in nonflyable status when they are programmed to be eventually returned to active flying.

SIOP - (Single Integrated Operational Plan)

The SIOP is a nuclear war plan which incorporates all United States nuclear weapons systems into a single plan for application against a potential enemy.

Tenant -

A unit, other organization, detachment, or person assigned to one commander and under the operational control either of the commander to whom assigned, or of another, but occupying or using, on a more or less permanent basis, certain quarters or other real property under the jurisdictional control of a different commander.

Unit Equipment

The number of operating active aerospace vehicles authorized to a unit for performance of its operational mission. The unit equipment authorization forms the basis for the allocation of operating resources to include manpower, support equipment, and flying hour funds.

STANDARD  
AIR FORCE ENVIRONMENTAL REFERENCE NUMBER (AFERN)  
SYSTEM

This "index" is the standard environmental attribute identification system used by the Air Force and adapted for ease in finding information within this statement

<u>AFERN</u>	<u>ENVIRONMENTAL ATTRIBUTE</u>
3.0	<u>NATURAL ENVIRONMENT</u>
3.1	<u>EARTH</u>
3.2	<u>WATER</u>
3.2.1	HYDROLOGY
3.2.2	WATER QUALITY
3.2.3	POLLUTION
3.3	<u>AIR</u>
3.3.1	METEOROLOGY
3.3.2	EMISSIONS INVENTORY
3.3.3	AMBIENT AIR QUALITY
3.3.4	ON BASE SAMPLING LOCATION AMBIENT AIR QUALITY (OPTIONAL)
3.4	<u>BIOTIC ENVIRONMENT</u>
3.4.1	PLANTS
3.4.2	ANIMALS
3.5	<u>RESOURCES (OPTIONAL)</u>
3.5.1	FUEL RESOURCES
3.5.2	NONFUEL RESOURCES
3.6	<u>SPECIAL INTEREST AREAS</u>
3.7	<u>NATURAL HAZARDS</u>

- 4.0        HUMAN ENVIRONMENT
- 4.1        DEMOGRAPHIC
- 4.1.1      POPULATION
- 4.1.2      ETHNIC/RACIAL DISTRIBUTION
- 4.1.3      MARITAL STATUS
- 4.1.4      HOUSEHOLD COMPOSITION AND SIZE
- 4.1.5      EDUCATIONAL ACHIEVEMENT, PERSONS 25 YEARS OF AGE AND OLDER
- 4.1.6      INCOME LEVELS (FAMILY)
- 4.1.7      OCCUPATION BY CATEGORY
- 4.2        ECONOMIC CHARACTERISTICS
- 4.2.1      DEFINITION OF REGION
- 4.2.2      EMPLOYMENT
- 4.2.3      PUBLIC FINANCE
- 4.2.4      BASE PROCUREMENT
- 4.2.5      HOUSING
- 4.2.6      SUMMARY OF THE REGION'S ECONOMY
- 4.3        INSTITUTIONAL CHARACTERISTICS
- 4.3.1      GOVERNMENT
- 4.3.2      DECISION PROCESS
- 4.3.3      EDUCATION
- 4.3.4      MEDICAL
- 4.3.5      COMMUNITY SERVICES AND FACILITIES
- 4.4        ACTIVITY SYSTEMS AND PLANS
- 4.4.1      TRANSPORTATION
- 4.4.2      UTILITIES
- 4.4.3      LAND USE

4.5           **AIR OPERATIONS CHARACTERISTICS**

4.5.2        AIRSPACE REQUIREMENTS

4.5.3        AIRSPACE UTILIZATION

4.5.4        AIR OPERATIONS

4.5.5        AIRSPACE EVALUATION

4.5.6        FLIGHT SAFETY EVALUATION

4.5.7        MAINTENANCE/AIRCRAFT GROUND OPERATIONS

4.5.8        OPERATIONAL CHANGE EVALUATION

## I. INTRODUCTION

### A. DESCRIPTION OF PROPOSED ACTION:

Severe budget restraints and the effects of inflation require the Air Force to examine every possible method to reduce costs. Congressional direction (Senate Armed Services Report No. 94-146, May 1975) has been clearly given that the Air Force is expected to take reductions in support activities. Due to force reductions and adjustments, the Air Force has greater strategic bomber and tanker basing capability than it requires. In considering ways of reducing this excess capacity, it has been determined the reduction could be achieved at significant manpower and dollar savings by realigning the SAC bas structure.

The Air Force is in the process of transferring 128 KC-135s from the active forces to the Air Reserve Forces to comply with Secretary of Defense Program Decision Memorandum (PDM) dated 29 July 1974 as amended 22 August 1974. The transfer of aircraft to the Air Reserve Force Units began in the summer of 1975 and has been proceeding at a rate of one unit conversion (eight aircraft) per fiscal quarter. With the knowledge and experience we have gained with this program, we are convinced that we can now successfully convert two Air Reserve Force Units per fiscal quarter. This increased rate of conversion would more quickly bring the Reserve Forces into the strategic mission and advance by one year the retirement of older, less efficient weapon systems presently operated by the Reserve Forces.

In addition to the transfer of KC-135s from the active force, there are programmed or possible adjustments that affect the B-52 forces. One squadron of B-52s is to be transferred to nonoperating active status and one squadron of B-52s can be redistributed to other installations already equipped with similar aircraft and possessing some excess capacity. These actions would reduce the number of B-52 squadrons by two while still retaining the strategic operational capability. The net effect of these actions, within the Strategic Air Command basing structure, is a capacity in excess of requirements.

Strategic Air Command B-52s and KC-135s are, in general, located on installations that also support other Air Force missions. There have been no concurrent drawdowns in other activities collocated with the strategic forces; and consequently the redistribution of strategic forces from these installations would not generate large savings in support costs, as the installations would still be required to support the other major activities. Maximum savings, therefore, can be realized

by closure or reduction of those installations presently supporting a single major B-52/KC-135 mission.

As a result of a preliminary review, the Air Force has determined that the following candidate action would result in substantial resource savings without detriment to combat capability and that this candidate action merits detailed study.

CANDIDATE ACTION:

Inactivate the 449th Bombardment Wing and its supporting organizations, close Kincheloe AFB MI by end of FY 77 and declare the base excess to Air Force requirements.

The 16 B-52H aircraft would be relocated, 14 to Ellsworth AFB SD and two to K I Sawyer AFB MI. The 16 KC-135 aircraft assigned to Kincheloe AFB would be relocated and transferred to the Air Reserve Forces. All military and civilian positions would be eliminated by the end of FY 77 except for a caretaker force of approximately 320 positions which would be retained until completion of base disposal. There were approximately 4200 personnel assigned to Kincheloe AFB on 31 March 1976, 3300 military and 900 civilians (550 Department of Air Force, 160 Nonappropriated Fund, 130 Army, Air Force Exchange Service and 60 contractor employees). The FY 4/77 Kincheloe AFB manpower authorizations are 2700 military and 750 civilians. (400 Department of Air Force, 160 Nonappropriated Fund, 120 Army Air Force Exchange Service and 60 contractor authorizations). The assigned number on 31 March 1976 exceeded FY 77 authorizations because of on-going program changes and Air Force-wide reductions in authorizations. For the purpose of this environmental evaluation, the impacts resulting from the total loss of personnel from the 31 March 1976 level (4200) to zero will be used. However, a reduction from the 31 March 1976 assigned strength level to the FY 77 authorizations of 2700 military and 750 civilians will occur without regard to this candidate action.

The relocation of aircraft would result in a net increase of 190 military authorizations at Ellsworth AFB and 110 military authorizations at K I Sawyer AFB. The apparent disparity in the additional manpower at Ellsworth and K I Sawyer AFBs is the result of a decrease in KC-135 aircraft at Ellsworth AFB which partially offsets the increase of B-52 aircraft. The assessments evaluating the impacts at Ellsworth and K I Sawyer AFBs are separate documents and listed in Chapter X, "Bibliographic References". The impacts at Ellsworth AFB would consist of adverse effects on schools and housing

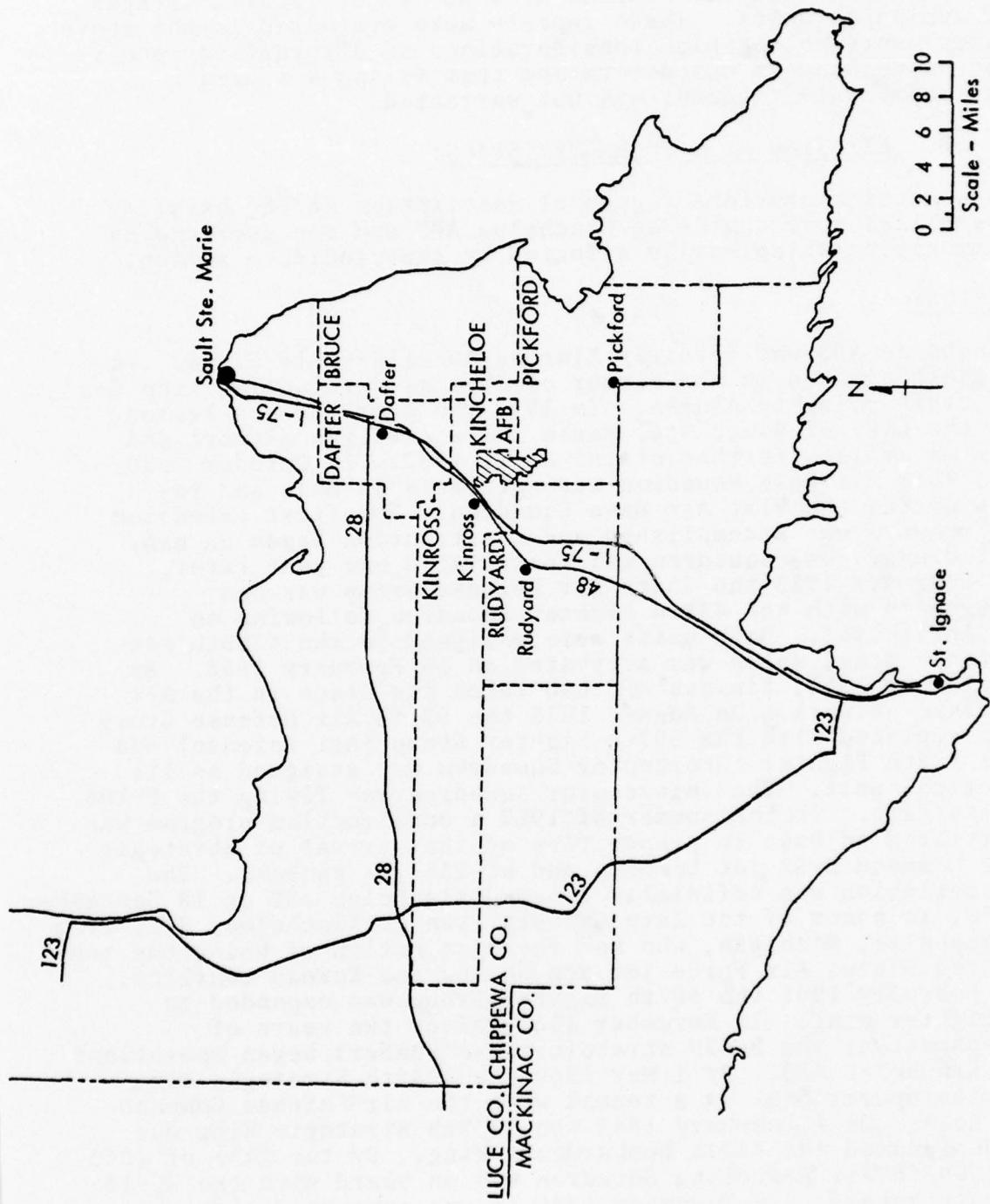
as well as minor increases in noise and air pollution. The impacts at K I Sawyer AFB area would be minor except for a serious impact in the housing area due to critical shortages of available units. These impacts were evaluated in the above assessments, along with considerations of alternative receiving bases; and it was determined that filing a separate environmental statement was not warranted.

B. EXISTING SITE CHARACTERISTICS:

This section provides a general description of the existing (baseline) environment of Kincheloe AFB and the surrounding communities which may be affected by the candidate action.

HISTORY

Kincheloe AFB was formerly Kinross Auxiliary Air Field. It was established in the summer of 1941 as a refueling stop for aircraft going to Alaska. In 1945 the airfield was leased to the City of Sault Ste. Marie for a civilian airport and was maintained in that status until 1952. In October 1952 the 4658 Air Base Squadron was activated on base and redesignated the 91st Air Base Squadron. The first extension of runways was accomplished and construction began on many buildings. The squadron was inactivated one year later. On February 1953 the 534th Air Defense Group was activated with the 438th Fighter Squadron following on 27 April 1953. Both units were assigned to the 4706th Air Defense Wing, which was activated on 16 February 1953. By September 1953, Kinross AFB had taken its place in the Air Defense network. On August 1955 the 534th Air Defense Group was replaced with the 507th Fighter Group (Air Defense) and the 438th Fighter Interceptor Squadron was assigned as its tactical unit. The interceptor squadron was flying the F-106 Delta Dart. In the summer of 1959 a construction program was initiated on base in preparation of the arrival of Strategic Air Command B-52 jet bombers and KC-135 jet tankers. The installation was officially renamed Kincheloe AFB on 18 September 1959, in honor of the late Captain Ivan C. Kincheloe, Jr., from Cassopolis, Michigan, who had the distinction of being the tenth United States Air Force jet ace during the Korean conflict. In February 1961 the 507th Fighter Group was expanded to a fighter wing. In November 1961, after two years of preparation, the B-52H stratofortress bombers began operations at Kincheloe AFB. By 1 May 1962 the 4239th Strategic Wing became operational as a tenant with the Air Defense Command as host. On 1 February 1963 the 4239th Strategic Wing was redesignated the 449th Bombardment Wing. By the fall of 1963 the 908th Air Refueling Squadron was on board with the KC-135 stratotankers. In November 1965 it was announced that the base was scheduled for closure on 1 October 1970. In the fall



Kincheloe AFB and Vicinity

of 1968 the 438th Fighter Interceptor Squadron departed the base. The 507th Fighter Group was deactivated on 1 October 1968, and the 4609th Air Base Group was activated for a nontactical mission of providing support to the 449th Bombardment Wing. In 1970 the base closure was delayed for one year and subsequently rescinded. On 1 July 1971 Kincheloe AFB became a Strategic Air Command base with the 449th Bombardment Wing as host.

KINCHELOE AFB AREA:

The description of the Kincheloe AFB study area is cross-referenced with the standard Air Force Environmental Reference Number (AFERN) index system.

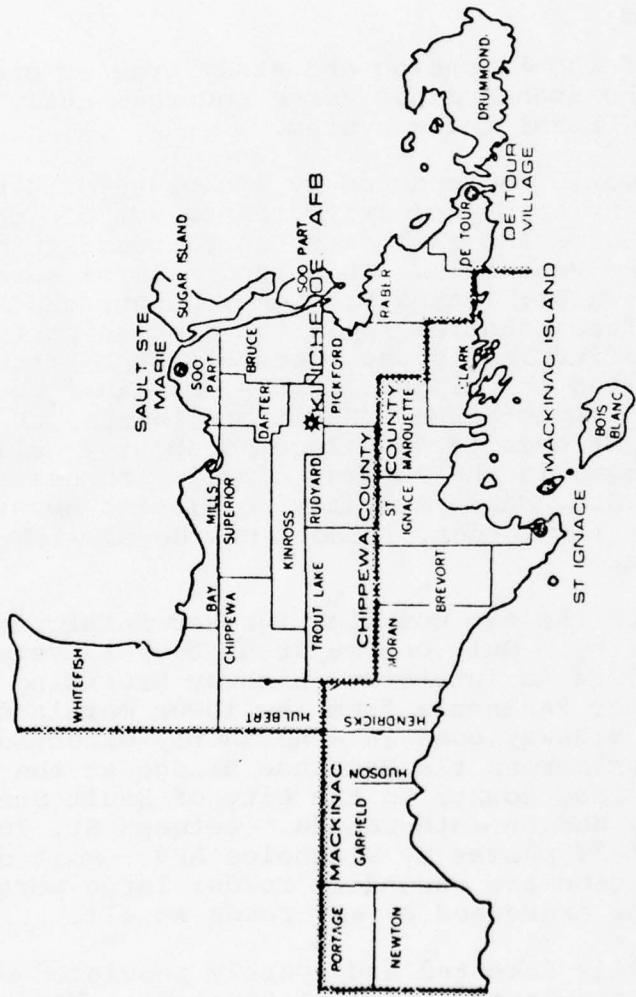
The region which would be impacted by a closure of Kincheloe AFB is determined by a very clearly defined set of geographical boundaries. Kincheloe AFB is located in the eastern portion of Michigan's Upper Peninsula. This land mass is surrounded on three sides by water: Lakes Michigan, Huron, and Superior. Chippewa and Mackinac Counties split the eastern portion of the Upper Peninsula latitudinally, so that, although Kincheloe is physically located on Chippewa County, Mackinac County must be included in the impact area. Sault Ste. Marie, MI with a population of over 16,000, located about 25 miles northeast of the base is the largest city in the eastern Upper Peninsula. Sault Ste. Marie, Canada, population about 74,000, immediately across the border, is not considered within the defined impact area.

The road network in the two counties further reinforces their geographic similarity. Only one major highway traverses the impact area. I-75 is an interstate highway providing access to the eastern Upper Peninsula from the lower mainland portion of Michigan; this highway goes in a northerly direction from its point of access across the Mackinac Bridge at the city of St. Ignace in Mackinac County to the City of Sault Ste. Marie in Chippewa County and on into Canada. Between St. Ignace and Sault Ste. Marie I-75 passes by Kincheloe AFB. Most other roadways in the region are secondary roads; large portions of the area are not traversed by any roads at all.

The region is heavily forested and sparsely populated except for the two major population nodes of Sault Ste. Marie and St. Ignace. Although Kincheloe AFB is a large residential and employment node, it lacks the diversity and permanence of an urban center.

The impact region is economically undiversified, relying primarily on Kincheloe AFB and a seasonal tourist industry

EASTERN UPPER PENINSULA PLANNING REGION  
KINCHELOE AFB AND SURROUNDING JURISDICTIONS



for its economic well-being. In economic terms, Kincheloe AFB is extremely important to the region, generating secondary jobs and payrolls in the two counties.

NATURAL ENVIRONMENT (AFERN 3.0)

EARTH (AFERN 3.1)

The topography of the base and surrounding area is relatively flat with drainage being away from the base in all directions. The base is located on a glacial outwash plain and the sub-surface soil below the topsoil is a loose, uniform sand.

WATER (AFERN 3.2)

The area is a known geologic water surplus area. Eight drilled wells are the source of water for the base. There are four principal streams/rivers within a ten-mile radius of the base. Water quality of the base and the region is considered good.

AIR (AFERN 3.3)

Particulates, from the base central heating plant, exceed the allowable level (0.98 lbs/MBTU versus 0.61 lbs/MBTU standard). A \$553,000 construction project, scheduled to be completed in fall 1976, will bring emissions within acceptable limits.

BIOTIC ENVIRONMENT (AFERN 3.4)

Approximately 4,000 acres of the total base area of 6,000 acres remains as natural, unimproved land. The acreage is primarily forestland and can be described as spruce-fir-northern hardwood forest.

Overall, the forestland on base is not unique and blends in with the surrounding area. The area contains a normal population of game animals, song birds, and flowering plants associated with the forestland. No threatened or endangered species or plants or animals are known to exist on the base.

HUMAN ENVIRONMENT (AFERN 4.0)

DEMOGRAPHIC (AFERN 4.1)

POPULATION (AFERN 4.1.1)

The impact area showed a slight decrease in population from 1960 to 1970, which coincided with decreases in the entire eastern half of Michigan's Upper Peninsula but was inconsistent with the 14% overall growth rate in the state.

Since 1970, the area's population has increased somewhat due to increased strength at Kincheloe AFB and the appeal of the area to elderly persons who want to retire away from the noise and congestion of the cities. Within Chippewa County, those townships with the highest growth rates (Dafter, Kinross, Pickford, and Rudyard) were all located immediately adjacent to Kincheloe AFB. Over half of the total increase in Chippewa County population from 1970 to 1975 occurred in Kinross Township, in which Kincheloe is located. During the 1972 to 1976 period, military manning at the base increased by about 360. Dependents of these personnel, plus additional increases in civilian personnel and their dependents, accounted for a large portion of the growth in Chippewa County between 1970 and 1975.

Mackinac County only grew by 5.1% from 1970 to 1975, in spite of its location on Lake Huron and Lake Michigan and its importance as a link between Michigan's Southern Peninsula and the City of Sault Ste. Marie along I-75 and the Mackinac Bridge. Most of the growth in Mackinac County occurred in Clark Township, near the villages of Hessel and Cedarville. Over half of Mackinac County's base personnel and dependents live in Clark Township. The County's largest population center, the City of St. Ignace, has attracted little growth over the five-year period despite its location on I-75 at the end of the Mackinac Bridge.

ESTIMATED 1975 POPULATION DISTRIBUTION IN KINCHELOE AFB  
IMPACT AREA

<u>JURISDICTION</u>	<u>TOTAL POPULATION</u>	<u>KINCHELOE EMPLOYEES AND DEPENDENTS</u>
<u>Chippewa County</u>		
Sault Ste. Marie	16,100	1,565
Kinross Twp. (includes Kincheloe AFB)	8,320	7,310
Rudyard Twp.	1,400	363
Pickford Twp.	1,280	280
Dafter Twp.	1,010	247
Superior Twp.	700	160
Others	7,220	515
County Total	35,330	10,280
<u>Mackinac County</u>		
St. Ignace City	2,940	40

Clark Twp.	1,880	68
Garfield Twp.	1,050	0
Others	4,280	22
County Total	10,150	130
<u>Two County Total</u>	<u>45,480</u>	<u>10,410</u>

ECONOMIC CHARACTERISTICS (AFERN 4.2)

EMPLOYMENT (AFERN 4.2.2)

The economy of the region is heavily dependent upon seasonal tourism. The base has provided significant economic input into the local economy and particularly in Chippewa County.

Unemployment for the region has been considerably higher than the national average. From January through November 1975 the Chippewa County unemployment rate ranged from 15.6% to 25.7%. The unemployment rate shows some seasonal variation with a low rate during the late summer and the high rates during the winter. In 1975 the number unemployed was approximately 3,100. As of 1 December 1974 this area was classified as an area of persistent unemployment.

As of 31 March 1976, Kincheloe AFB employed approximately 4,200 people consisting of 3,300 military and 900 civilian personnel. The total annual payroll is approximately \$34.2 million (this includes only military and civil service payrolls).

PUBLIC FINANCE (AFERN 4.2.3)

The principal revenue sources are property taxes, a state income tax, and revenue sharing. Together these sources contributed about \$1.8 million to the region. There are no local sales taxes collected by the counties of Chippewa and Mackinac. The Federal Impact Assistance Program for schools, as established by PL 81-874 and PL 93-380, provides \$1,047,000 during fiscal year 1976 to public schools attended by base employee children in the area.

BASE PROCUREMENT (AFERN 4.2.4)

In addition to the payroll generated at the base, there are also contributions to the local economy in terms of local procurements. It is estimated that \$9.8 million in local procurements was issued during 1975. A large percentage of the procurements for supplies, travel, transportation, and local services was paid into the local region.

### HOUSING (AFERN 4.2.5)

Seventy eight new construction permits for single family housing were issued in the two county areas in 1973. Ninety were issued in 1974. In 1975 it was estimated that there were 5,250 year round housing units in the City of Sault Ste. Marie and 4,170 in the rest of Chippewa County. Of these, almost 60% of the housing units were built prior to 1950. Kincheloe AFB has 1,383 military family housing (MFH) units of which 317 are designated for officers and 1,066 for enlisted personnel. Two hundred of these are relocatable housing erected in 1964. There are 125 trailer spaces available on base for military personnel.

### INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

#### GOVERNMENT (AFERN 4.3.1)

The local governments are that of the City of Sault Ste. Marie and Chippewa County. They are the Commissioner-Manager form of government.

There are five political jurisdictions within a ten-mile radius of Kincheloe AFB. They are the Townships of Pickford, Kinross, Dafters, Rudyard, and Bruce. So far, only Bruce Township has instituted land use and construction ordinances.

Matters of regional scope or importance are addressed by the Eastern Upper Peninsula Regional Planning and Development Commission. This agency provides background information to the local government units in the Eastern Upper Peninsula Region (Chippewa, Luce and Mackinac Counties), for their land use and activities. There are also federal regions within Chippewa County of HUD, A-95 Clearinghouse, Department of Agriculture and others.

The City of Sault Ste. Marie is involved in local planning through the Community Development Office, the City Planning Commission, the Department of Housing and Urban Development, and the 701 City Planning Program.

#### OTHER INSTITUTIONS

Major public and private institutions which contribute significantly to the economy include the U.S. Army Corps of Engineers, the U.S. Coast Guard, U.S. Customs and Immigration and Sault Edison Electric Company.

#### EDUCATION (AFERN 4.3.3)

Total public school enrollment for the two-county region which includes five school districts was 9,528 in 1976

for the grades K-12. Of this total, 2,929 students were dependents of Kincheloe AFB employees (military and civilian PL 81-874 students).

In Mackinac and Chippewa Counties, school enrollment in general is decreasing. There is no overcrowding in any of the schools. There are two elementary schools located on base, both owned and operated by the Rudyard School System. The total enrollment is 840 students. The local college, Lake Superior State College is gaining in enrollment and, from 1974 to 1975, enrollment increased more than 10%. Current enrollment is 2,200 students.

Degrees are offered on base through Lake Superior State College and Central Michigan University. Involvement in the on-base programs by the civilian community is 18% of total enrollment.

#### MEDICAL (AFERN 4.3.4)

There are five civilian hospitals with a total bed capacity of 770 within the Kincheloe AFB region. The nearest civilian hospital is 23 miles from the base.

The medical services on base consist of a 25-bed hospital and a dental clinic. The hospital cannot handle major surgery and is staffed by 11 physicians and 150 other medical personnel. Emergency services are available for local civilians living near the base. The base facility serves approximately 4,650 outpatients each month.

#### COMMUNITY SERVICES AND FACILITIES (AFERN 4.3.5)

An informal mutual aid agreement exists between the base police and all local police departments. In the area of fire protection, a bilateral mutual aid agreement exists between the Base Fire Department and local departments as well as with the Michigan Department of Natural Resources.

Recreational facilities consist of a 300-seat capacity theater, recreation center, base gymnasium, five tennis courts, five basketball courts, one 12-lane bowling alley, one nine-hole golf course, a motorcycle riding area, and a model airplane flying area. A recreational area, consisting of a 14-acre lake, swimming, beach, and picnic area, is also available.

#### ACTIVITY SYSTEMS AND PLANS (AFERN 4.4)

##### TRANSPORTATION (AFERN 4.4.1)

The civilian airports of any significance in the region are the City-County Airport in Sault Ste. Marie MI (Sault Ste. Marie Federal Airport in Canada is outside defined impact area).

The major rail terminals in the impact area are located in St. Ignace, Rudyard, Sault Ste. Marie. Kincheloe AFB uses the railroad only for the shipment of a small amount of freight and coal for the base heating plant.

The major highway serving the base is Interstate I-75 which is an excellent four-lane highway. Kincheloe is also served by two two-lane highways which link the base to all the road and highway systems in the region. The highway and road systems are more than adequate to handle all traffic conditions. The internal road system for the base handles traffic well. There are no major traffic problems.

#### UTILITIES (AFERN 4.4.2)

Various utility systems are in existence to meet the needs of Kincheloe AFB. All water used on base is obtained from on-base wells. Except for the City of Sault Ste. Marie the surrounding area uses privately owned wells.

The average daily flow of sanitary wastes is 0.65 million gallons per day. The sanitary wastewater treatment plant is of the trickling filter type and is capable of handling twice the present base generation. Current effluent data indicates that the treatment plant is in compliance with the final effluent requirements of the Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES) permit.

Kincheloe AFB purchases natural gas, electricity, and fuel oil for local sources.

A portion of the solid waste generated is collected by private contractor and disposed of in an off-base state licensed landfill. The sludge from the sewage treatment plant is disposed of in the base sanitary landfill which has an expected life of 15 years.

#### LAND USE (AFERN 4.4.3)

Kincheloe AFB is located midway in the US Interstate 75 central corridor. The corridor area extends from two to ten miles east and west of I-75 and encompasses Kincheloe AFB and Sault Ste. Marie as the primary population centers, the communities of Rudyard and Dafters as secondary population centers and the town of Kinross as a tertiary population center. Major land uses in Kinross, Dafters, and Rudyard are currently residential and agricultural with numerous mixed land use developments. The community of Pickford, a secondary population center, is within 25 miles of the base though

not in the central corridor. All the communities are within the same regional planning and statistical unit, the Eastern Upper Peninsula Planning and Development Commission.

Rudyard and Pickford communities are located on prime agricultural land to the southwest and southeast of Kincheloe AFB respectively. Both have commercial developments sufficient to provide for the populaces of 500 making each community self-sustaining. Rudyard serves as a center for education, retail trade and services, and as a railway distribution point.

#### AIR OPERATIONS CHARACTERISTICS (AFERN 4.5)

The Kincheloe AFB airport area includes the airspace within a horizontal radius of five statute miles from the geographical center of the aerodome, extending from the ground level to 3,000 feet. Kincheloe AFB controls all aircraft using the American and Canadian Sault Ste. Marie airports in addition to base air traffic. Over 30,000 aircraft operations per year take place at the three airports, Kincheloe accounting for nearly 25,000 of these. These numbers include takeoffs, landings, low approaches, and touch-and-go maneuvers.

A portion of the annual flying hours for 1975 were as follows:

<u>TYPE AIRCRAFT</u>	<u>FLYING HOURS</u>
B-52	6,116
KC-135	4,194

There are no known hazards to flight nor are any anticipated in the future. Airspace allocation is sufficient and safe to conduct and support mission requirements and satellite airports.

II. RELATIONSHIP OF THE PROPOSED ACTION TO LAND USES PLANS,  
POLICIES, AND CONTROLS

KINCHELOE AIR FORCE BASE

LAND USE (AFERN 4.3.3)

LAND OWNERSHIP AND VALUE (AFERN 4.4.3.2)

Ownership of lands in the Upper Peninsula is generally about 40% public, 28% large private, and 32% small private ownership. The majority of land surrounding the base is state-owned forest; there are, however, isolated tracts of privately-owned land bordering the base to the west and southwest. Future ownership and value of these lands would be largely influenced by the future use of the base lands and facilities. Ownership of publicly-owned forest lands would not be expected to change with the base closure.

The counties of Chippewa, and Mackinac are approximately 75%, and 87% forest land, respectively. Agriculture is the second most dominant land use. Together forest lands and agricultural lands comprise about 87% of the two county region. This region is bordered by three of the Great Lakes--Lake Michigan, Lake Huron, and Lake Superior. The combination of forest, lakes, and a general remoteness of this area gives it a strong recreation orientation. Regional land use would not be affected significantly by closure of Kincheloe AFB, regardless of the fact that the base is the second largest population center in the Eastern Upper Peninsula.

The Chippewa County Department of Equalization has reported that land sales activity in the county, particularly that related to small parcel development, has declined substantially as a result of the announced candidate closure action. The amount of money available from some area banks for loans to prospective home buyers in the county has already declined and would be substantially lowered if and when it were announced that the base would definitely close. In fact, real estate loans totaling \$850,000 from one bank made since July 1975 would not have been requested or made had the bank or borrower known that Kincheloe AFB would be a candidate to close.

Property values throughout Chippewa County have dropped since announcement of the candidate base closure action; actual closure could reduce property values throughout the

vicinity of the base by an estimated 30%, according to Mr. William T. Ranta, Director, Chippewa County Department of Equalization. In local communities and in Sault Ste. Marie, it is probable that the greatest instability in ownership and market values would occur on those properties currently used for area housing developments, apartment complexes, mobile home courts, professional and mercantile establishments in the smaller communities where business volumes are most dependent on base employees, and on service stations, taverns, etc., located on main travel routes nearest the base.

1970 LAND USE PROFILE: CHIPPEWA AND MACKINAC COUNTIES  
MICHIGAN

USE	CHIPPEWA COUNTY		MACKINAC COUNTY	
	ACRES	PERCENT	ACRES	PERCENT
Total Area	1,056,640	100.0	691,840	100.0
Inland Water	38,912	3.7	42,840	6.2
Land Surface	1,017,728	96.3	649,216	93.8
Forested	766,500	75.3	561,900	86.6
Agriculture	96,495	9.5	28,483	4.4
Transportation	17,756	1.7	11,604	1.8
Recreation	18,116	1.8	773	0.1
Urbanization	12,518	1.2	1,792	0.3
Other	106,343	10.5	44,664	6.9

FUTURE LAND USE (AFERN 4.4.3.3)

Future land use around the base would greatly depend on the use to which base lands and facilities are directed following a possible base closure. There are presently no plans for any future developments or recreational areas around the base and no indications of expansion of municipal services to undeveloped areas.

The candidate base closure action would be expected to depress the area economically to the extent that development trends indicated in past regional plans would no longer be valid. Without effective mitigation measures, loss of the economic input of Kincheloe AFB would cause the region as a whole and Chippewa County in particular to depend even more heavily on tourism for their economic health. Development of seasonal homes and recreational facilities would continue in the present primary recreation areas of the region. However, most of the base personnel make extensive use of tourist facilities in the two-county area and loss of the base would have some effect on reducing the region's tourist trade as well.

Residential and commercial development trends indicated in the central corridor area of I-75 would be significantly slowed, particularly near and within the communities of Kinross and Dafters, and to a lesser extent in Rudyard and Pickford.

During the necessary period of adjustment, residential and commercial use areas in the small communities, along major base access routes and in Sault Ste. Marie, would probably receive significantly reduced investment in maintenance, especially where substantial numbers of vacancies have occurred. These areas would be highly susceptible to deterioration and decline, tending to further depress land values.

There would be commercial development areas which would likely lose such significant volumes of business with a closure of Kincheloe AFB that they would no longer be operable. By way of example, the Soo Plaza Shopping Center, a recently completed \$1.5 million investment and the largest shopping center in the region of influence, may lose almost one half of its present business with the loss of base personnel from the area. Another example of commercial losses affecting the future land use of the area would be the extensive mobile home/trailer court business; mobile home sales are indicated in the accompanying Table. As can be seen, these establishments would probably have to relocate to other areas of the region or perhaps out of the region altogether if the base closes.

RELATIONSHIP OF TRAILER SALES IN CHIPPEWA COUNTY  
TO KINCHELOE AFB PERSONNEL

<u>Company</u>	<u>Total Trailer Homes Sold</u>	<u>Percent Sold to Kincheloe Military and Civilian Employees</u>
Riverside	200	70
Ideal Homes	50	25
King of Homes	70	40

### III. PROBABLE IMPACT OF THE PROPOSED ACTION ON THE ENVIRONMENT

#### KINCHELOE AIR FORCE BASE AREA

##### NATURAL ENVIRONMENT (AFERN 3.0)

###### EARTH (AFERN 3.1)

The candidate action should not generate significant adverse effects, nor alter the fundamental physiographic, geological, and soil characteristics and properties of the area. While the soil consists primarily of poorly graded sand, subject to erosion when disturbed, it is sufficiently fertile to support adequate vegetal cover, and has been managed to maintain such cover. Allowing it to revert to a natural state may actually enhance erosion protection. Surface and sub-surface conditions should remain unchanged since construction projects are not involved. Solid waste and/or refuse generated should decrease. The overall effect should be minimal, and the useful life of sanitary landfills in the area should be extended.

###### WATER (AFERN 3.2)

A decrease in discharges of wastewaters on base (currently 0.65 million gpd) and in the civilian community would obviously occur. While the effect on effluent receiving waters should be favorable, there are no existing discharge problems.

###### AIR (AFERN 3.3)

A decrease in air pollutant emissions on base and in the civilian community would be anticipated. The decreases on base would result directly from the decrease in aircraft operational activity and stationary emissions.

##### BIOTIC ENVIRONMENT (AFERN 3.4)

Closure of Kincheloe AFB would have only a slight and perhaps favorable impact on the biota.

Presently, there are no major game or wildlife programs in being at Kincheloe. Although there are approximately 4,000 acres of woodland, this acreage in comparison with the surrounding area is not unique. There are no records of occurrence for any rare, threatened or endangered species on base property.

##### HUMAN ENVIRONMENT (AFERN 4.0)

###### DEMOGRAPHIC (AFERN 4.1)

#### POPULATION (AFERN 4.1.1)

A key part of the analysis is the determination of the magnitude of population loss which would be experienced by Chippewa and Mackinac Counties after possible implementation of the candidate action. This population loss would come about in two ways: a direct population loss would result from the transfer of military personnel and their dependents, and the elimination during FY 1977 of military and civilian positions; and indirect population loss would result from the repercussions of the overall impact of a base closure on the two-county economy.

Direct population losses were quantified based on the distribution of place of residence of Kincheloe personnel and use of marital and dependency factors. Although not quantified, indirect population impacts would also occur.

The overall direct loss of population occurring in Chippewa County from the date of announcement of closure until completion of the major action is estimated to be over 10,000 persons or 29% of total county population. This population loss would consist of an estimated 3,300 military personnel, 900 civilian personnel, and their 6,600 dependents. In Mackinac County, population loss is estimated at 130 persons or 1.3% of the total. The overall loss for the bi-county impact region is estimated at 10,400 persons or 23% of the two-county population.

The largest direct population loss will occur in Kinross Township, which includes Kincheloe AFB, is estimated to lose over 7,300 of its 8,300 inhabitants for a net loss of almost 90%. Other heavily affected areas are Dafters Township (about a 24% loss), Pickford Township 22%, Rudyard Township 26%, and Superior Township 23%. All of these townships, with the exception of Superior, are located in close proximity to Kincheloe and thus have been the prime locations for residence by base personnel. The City of Sault Ste. Marie, located to the north along I-75, is estimated to lose 10% of its population, representing a total of about 1,565 persons.

#### EMPLOYMENT (AFERN 4.2.2)

The impact region exhibits very little economic diversity. The two major sources of area economic impetus are tourism and the presence of Kincheloe AFB. Consistent with this orientation, the major employment sectors are government, retail trade and services. There is very little manufacturing activity within the region although an effort is being made to attract industries to Sault Ste. Marie.

Agriculture is also very limited, consisting primarily of the raising of beef cattle and the growing of hay. Construction activities are hindered by the rigorous climate of the region and are negligible during the winter. The following table shows the civilian jobs available within Chippewa and Mackinac Counties.

CIVILIAN EMPLOYMENT PROFILE, CHIPPEWA AND  
MACKINAC COUNTIES, 1975

	AVERAGE ANNUAL EMPLOYMENT		
	CHIPPEWA	MACKINAC	TOTAL
Manufacturing	375	150	525
Construction	275	125	400
TCU	550	125	675
Wholesale Trade	125	1/	125
Retail Trade	1,450	425	1,875
Fire	225	1/	225
Services	975	750	1,725
Government	3,675	925	4,600
Total Wage and Salary Employment	7,650	2,500	10,150

1/ Included in Services

Source: Michigan Employment Security Commission, 1976.

Within this framework, Kincheloe plays a strong role in supporting the area's labor force, providing residents with both direct employment (on base) and indirect employment, (jobs created by the needs of the base and its personnel). The strong attraction of the two-county area to tourists in July and August is also a major factor in its economy, greatly influencing not only employment in various sectors but also unemployment rates, which fluctuate widely between August and December or January.

RESIDENT LABOR FORCE (AFERN 4.2.2.1)

The labor force in each county has been increasing from 1970 to 1975. At the same time, the employment trend has been to increase, but at a slower rate than the labor force. As a result, average annual unemployment has also been rising. The situation is particularly acute in Chippewa County, where annual average unemployment has risen from 1,400 in 1970 to 2,400 in 1975. In Mackinac County, the number unemployed in 1975 was only slightly higher than the number unemployed in 1970, resulting in an actual decrease in the unemployment rate over the six-year period.

The present average annual unemployment rates are 20.5% for Chippewa County and 11.9% for Mackinac County. The two counties have a combined total of 3,100 unemployed out of a total labor force of 17,600 for an unemployment rate of 17.6%. The following table indicates characteristics of the Chippewa and Mackinac resident labor force and the employment figure includes jobs held by residents but located outside of the two-county area.

CHARACTERISTICS OF THE RESIDENT LABOR FORCE,  
CHIPPEWA AND MACKINAC COUNTIES, 1970-1975

	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
<u>Chippewa</u>						
Labor Force	10,075	10,650	10,800	10,600	11,325	11,725
Employment	8,675	8,975	9,325	9,000	9,425	9,325
Unemployment	1,400	1,675	1,475	1,600	1,900	2,400
Rate	13.9%	15.7%	13.7%	15.1%	16.8%	20.5%
<u>Mackinac</u>						
Labor Force	4,475	5,050	5,550	5,700	6,150	5,875
Employment	3,800	4,400	5,000	5,250	5,600	5,175
Unemployment	675	650	550	450	550	700
Rate	15.1%	12.9%	9.9%	7.9%	8.9%	11.9%

Source: Michigan Employment Security Commission

The analysis of employment and unemployment in the impact area is complicated by the extreme seasonal nature of employment in one of the impact counties. In 1975, the unemployment rate varied from 5.0% in August to 20.0% in March in Mackinac County. The tourist season can be clearly defined as July, August, and September based on the relatively low unemployment rates in those months. December, January, February, and March have extremely high unemployment rates. These findings hold constant for the other five years from 1970 through 1974, although even wider variations in the unemployment rate occur in certain years.

Chippewa County is, in some measure, also affected by seasonality since it has major tourist attractions of its own. The seasonal effects are tempered, however, by the presence of Kincheloe AFB which requires services year round. In spite of smaller fluctuations in unemployment and the presence of the base, Chippewa County has a much higher unemployment rate than does Mackinac County. In

1975, Chippewa County's unemployment fluctuated between 15.6% in September and 25.7% in January. As expected, the sectors showing the most seasonal variation in employment were retail trade, services, and construction.

#### EMPLOYMENT IMPACT

The two-county region is anticipated to face a direct employment loss of 3,300 military personnel and 900 civilian personnel. These losses are estimated to result in indirect losses of about 3,100 civilian jobs in the local economy, primarily in the services, retail trade, and local government sectors. In the following table, the indirect employment loss was estimated using derived multipliers. The multipliers were 0.23 for the military and 2.67 for the civilian direct employment loss.

#### ESTIMATED EMPLOYMENT IMPACT OF THE CLOSURE OF KINCHELOE AFB ON CHIPPEWA AND MACKINAC COUNTIES

	<u>1975 Baseline</u>	<u>Post Action Total</u>
Direct Employment Loss		
Military	--	3,300
Civilian	--	900*
Indirect Employment Loss		
Military	--	750
Civilian	--	2,400
		3,150
Labor Force	17,600	17,060
Unemployment	3,100	6,610
Unemployment Rate	17.6%	38.7%

\* It is assumed that 60% of the direct civilian job loss would leave the area. This 540 (60% of 900) is subtracted from the county labor force and 360 (40% of 900) is added to the unemployment figure along with the total indirect employment loss.

The large increase in unemployment projected for the impact area is expected to result in an overall unemployment rate of 38.7% in the impact area on an average annual basis. The fact that this estimated rate is an annual average tends to underestimate the effect of the candidate action. It has

been DOD experience in other studies of base closures that it takes about six months for impacts to work their way through an economy and for unemployment to hit peak levels. The unemployment rate due to the candidate action could be compounded by the unemployment rate due to the seasonality of the local economy. Prior to the economic impetus brought on by the onset of the tourist season, it is likely that the unemployment rate would rise much higher than 38.7%. It is also likely that many small businessmen could not remain in business until the summer season and would thus be a permanent loss to the two-county area.

The lack of year-round basic employment in the area after a possible base closure might increase unemployment problems beyond predicted levels. If the base were to close, the local economy's only support would come from the relatively short tourist season unless some year-round means of economic support could be found, such as the establishment of manufacturing facilities.

#### PUBLIC FINANCE (AFERN 4.2.3)

The impact of a base closure on public finance activities would in the short term not be on revenue sources or even expenditures. Major impacts can be expected, however, on capital improvements programming activities (see AFERN 4.2.3.5).

#### INCOME TAXES (AFERN 4.2.3.1.1)

No local income taxes are collected by Michigan counties. A portion of state income tax collections is returned to counties, but this is based on the county's share of the state's 1970 population. No impact on income tax distributions by the State of Michigan to Chippewa and Mackinac Counties would be perceived until 1980, the year a new population base would be established.

#### REAL ESTATE PROPERTY TAXES (AFERN 4.2.3.1.2)

No reduction in real estate property tax collection would be anticipated as an immediate short-term result of a base closure. Although off-base housing units would be vacated by relocated personnel, these homes would either be sold to private purchasers, remain in the ownership of present owners,

or be purchased by the Federal Government, which has a commitment to purchase homes that relocated base personnel are unable to sell. In all cases, property taxes would continue to be paid on these properties. In the case of rental properties landlords would still be liable for property taxes, whether or not the units were occupied.

In the short run, market values of surplus housing units would be depressed because supply would far exceed demand. The State of Michigan requires an annual reassessment of properties on the tax rolls. This would mean that approximately one year after a base closure and saturation of the housing market with vacant units, the taxable valuation of real property within the two-county impact area could decrease, bringing about a possible reduction in property tax collections. This reduction could be offset by a possible reduction in the demand for government provided services in the local area, reducing the cost of local government.

With an available surplus of owner-occupied and renter-occupied housing on the market, it is expected that new housing construction would be virtually at a standstill over the short term.

#### REVENUE SOURCES (AFERN 4.2.3.3)

Only three sources of public revenues are expected to be impacted by the candidate action: federal revenue sharing, local revenues from provision of services such as public utilities, and PL 81-874 (education) funds.

Possible reductions in education funds will be addressed in the section on education (AFERN 4.3.3.4). Local collections of fees for services would likely be reduced due to decreased demand. There is still a fixed cost to providing these services, so that in the short term, a fiscal imbalance would be likely, unless user charges are increased. Over the long term, depending on which mitigating measures are utilized, the imbalance in the costs of providing public utilities could likely become less pronounced.

Federal revenue sharing funding is based upon a complicated formula which considers population, statewide taxation, and intergovernmental transfers. Allocations made to states, counties, and communities are subject to per capita minimums

and maximums. If the total county dollar allocation of revenue-sharing funds divided by population continues to fall within these limits after the proposed action no significant adjustment is necessary in the county's allocation. In Chippewa and Mackinac Counties, the amount of departing population would cause the county's per capita allocation of revenue-sharing funds to exceed the maximum limit; therefore, a significant change in revenue-sharing allocations is anticipated. The magnitude of this change cannot be estimated as it would involve recomputation of revenue-sharing allocations for the entire State of Michigan and its component counties, cities, and townships.

#### CAPITAL IMPROVEMENTS PROGRAMMING (AFERN 4.2.3.5)

The City of Sault Ste. Marie has capital improvements planned or underway with a total cost of \$7.4 million over the next three years. These programs include water and sewer repairs and extensions, a housing project, and urban renewal. Chippewa County has programmed projects worth \$670,000 over the next two years, primarily in the areas of road and bridge construction. Within Mackinac County, improvements worth \$5.4 million have been scheduled for the next four years, primarily for road construction.

The closing of Kincheloe AFB could affect the status of these projects in several ways. It could be determined that some projects are no longer necessary if the population they were to serve is substantially reduced. The cost of others may not be supportable as the counties' tax bases and consequent bonding capacities are reduced over the next few years. Commitments which have already been made to projects which are no longer financially feasible or politically desirable may cause problems in local government financing and channel available resources away from basic service provisions to project funding. Some projects which may be necessary to the area would no longer be financially feasible and would have to be postponed until the local economy recovered.

#### ECONOMIC ACTIVITY (Direct Losses)

#### BASE PROCUREMENT (AFERN 4.2.4)

Of the actual procurement contracts awarded by Kincheloe AFB in FY 1975, approximately 47% are estimated to have been awarded in Chippewa, Mackinac, and Luce Counties. This

represents a total of \$3.9 million to the three county area in FY 1975, up from \$3.2 million in FY 1974.

Various other purchases were made in the local area through offices other than Procurement, primarily for the BX and commissary, services, travel and transportation. The total value to the local area of the miscellaneous purchases cannot be readily estimated at this time as the data is unavailable.

The base exchange and commissary spent \$1.6 million locally for food and other goods or approximately 17% of their total purchases.

Base construction programs for 1975 were carried out in three major areas: operations and maintenance, nonappropriated fund, and military construction projects. The programmed cost for these activities totalled \$9,929,000 in 1975 of which \$4.3 million (43.9%) were awarded locally.

This loss of local procurement would be reflected within the indirect employment loss calculation.

This loss would be reflected in secondary employment in the region.

#### PERSONAL INCOME

In 1975, the base payroll contributed 19.7% of total personal income in Chippewa and Mackinac Counties. The candidate action can be estimated to reduce total personal income in Chippewa County from \$156 million to \$119 million and in Mackinac County from \$44 million to \$43.5 million.

TOTAL PERSONAL INCOME LOSSES, CHIPPEWA  
AND MACKINAC COUNTIES

	<u>Baseline</u>	<u>Total Reduction</u>	<u>Post Action</u>
<u>Chippewa</u>			
Total Personal Income	\$156,000,000	\$36,500,000	\$119,500,000
<u>Mackinac</u>			
Total Personal Income	\$ 44,000,000	\$ 500,000	\$ 43,500,000
Total	\$200,000,000	\$37,000,000	\$163,000,000

HOUSING (AFERN 4.2.5)

The housing market in Chippewa and Mackinac Counties over the 1970-1975 period is characterized by a very slow increase in the housing stock, high vacancy rates, and a high rate of seasonal units to year-round units. The closing of Kincheloe AFB would increase further the vacancy rates and depress housing market values.

COMMUNITY HOUSING (AFERN 4.2.5.1)

The 1975 housing stock in Chippewa and Mackinac Counties shows very little change since 1970. Demolitions have almost equaled new building permits issued. The year-round housing stock consists almost entirely of single-family units (85.6% in Chippewa and 93.4% in Mackinac County). Vacancy rates in both counties are higher than are necessary for normal functioning of the housing market (4-7%). Chippewa had a year-round housing vacancy rate of 16.8% in 1975 and Mackinac County had a rate of 29.5%.

The two counties also had a large share of their housing as seasonal units: 18.9% of all housing units were seasonal in Chippewa County and 30.3% were seasonal in Mackinac County.

### HOUSING VACANCY RATES

The candidate action would result in a direct increase in vacancies of approximately 290 units in Sault Ste. Marie, 310 units in the rest of Chippewa County, and 35 units in Mackinac County. If the vacancy rate can be assumed to remain constant from now until the end of the candidate action implementation, the resulting after-action vacancy rates would be 15.2%, 20.5%, and 30.4%, respectively. These rates are far in excess of normal vacancy rates and would represent a saturation of the housing market with more units than there would be demanded. The short-term result of this saturation would be depressed housing values and difficulties in selling homes by people leaving the region to seek other opportunities. The following table summarizes the impact on the existing housing market.

### POST ACTION HOUSING MARKET VACANCY RATES, CHIPPEWA AND MACKINAC COUNTIES

	Sault Ste. Marie	Chippewa (Including Sault Ste. Marie)	Mackinac	Total
<b>Year-Round</b>				
Housing Stock, 1976	5,250	9,420	4,200	13,620
Existing Vacancies	510	1,580	1,240	2,820
Existing Vacancy Rate	9.7%	16.8%	29.5%	20.7%
Units Vacated by Action	290	600	35	635
Total Vacancies	800	2,180	1,275	3,455
Post-Action Vacancy Rate	15.2%	23.1%	30.4%	25.4%

The vacancy rates after the candidate action could be even higher if the announcement of closure has already precipitated some departures from the area. Even before a decision is made on whether to close Kincheloe AFB, the candidate action may be having an adverse effect on the region's housing values.

#### SUMMARY OF THE REGION'S ECONOMY (AFERN 4.2.6)

The proposed action would cause an estimated \$19.3 million loss in retail sales and a decrease in regional economic output of \$45.9 million, or about 28.2% of the gross regional output.

#### INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

##### GOVERNMENT & SERVICE ORGANIZATIONS

It is not expected that a closing of Kincheloe AFB would change the present forms of government in the area. Both the City of Sault Ste. Marie and Chippewa County which are commissioner-manager forms of government would remain so. The governing bodies, however, would have to adjust to the loss of population and, therefore, the loss in revenue by a closure of the base. (About 25% of the Chippewa County population is Kincheloe AFB personnel.) Income taxes, property taxes, and federal impact aid for public schools and state operating aid would all be affected by closing the base.

The planning agencies in the City of Sault Ste. Marie would be affected to some degree by the loss of population in the area. Since revenues would be lowered, plans for updating street and utility services would be affected. Currently Bruce Township is the only township in the area that has instituted land use and construction ordinances. Four kinds of zoning districts (resort, agricultural, forest, and industrial) were organized with size and structure of buildings designated in each district as well as certain limitations to noise. The other four townships within a ten-mile radius of the base (Pickford, Kinross, Dafters, and Rudyard) are expected to establish ordinances similar to those in Bruce Township. A closure of Kincheloe AFB would undoubtedly affect these plans.

Numerous base employees either belong to or work with local government agencies. With a base closure, reorganization would be required within these bodies.

Base employees and their dependents are also either directly or indirectly involved with various local community activities such as Kinross Township 4-H Center, adult and youth recreation programs, professional societies, and parks and recreation programs. Two military personnel from Kincheloe AFB serve on the Kinross Parks and Recreation Board. Three military personnel serve in the Kinross Booster Club which was established to promote the betterment of the Kinross Township Community. The base AICUZ Project Officer has been appointed to act as liaison between local Planning and zoning commissions and the base. The community depends on the support and participation of Kincheloe AFB personnel and their dependents in many respects.

Two groups were developed specifically for the purpose of maintaining liaison between the community and the base. The Sault Chamber of Commerce Military Affairs Commission includes approximately 30 civilian members in addition to several base personnel. This organization sponsors events about four times each year and also provides continuing liaison with the Sault Ste. Marie business community. A second group recently organized to maintain liaison between the base and community leaders in the three counties of Chippewa, Luce, and Mackinac is the Base Community Council. Membership includes Wing and Base Commanders, as well as civilian members from county commissions, school boards, and various community organizations.

In addition, eight other groups have joint civilian/base memberships although they were not established primarily for base community liaison purposes. They are as follows:

Hiawathaland Law Enforcement Officers Association;  
Air Force Association, Sault Chapter;  
Chippewa County Council of Service Agencies;  
Chippewa County Bicentennial Commission;  
Chippewa County United Way;  
Hiawathaland Chapter, Federally Employed Women, Inc.;  
Sault Ste. Marie and Rudyard Ministerial Associations;  
and Rudyard Career Education Advisory Commission.

### EDUCATION (AFERN 4.3.3)

Five school districts in the two-county region would be impacted by base closure. As described below, the total loss in enrollment would necessitate the closing of certain schools and, in the long term, would reduce funding levels.

#### PUBLIC SCHOOL ENROLLMENT (AFERN 4.3.3.1)

The average FY 1976 enrollment in the five school districts currently receiving PL 81-874 funding is 9,528. Of this number, 30.7% or 2,929 students are dependents of base personnel. It is estimated that over 2,400 of Kincheloe dependent students would have left the two-county area at the termination of the candidate action. The overall result would be a 25.2% reduction in public school enrollment in the impacted school districts in Chippewa and Mackinac Counties..

#### ESTIMATED PUBLIC SCHOOL ENROLLMENT CHIPPEWA AND MACKINAC COUNTIES

##### KINCHELOE AFB DEPENDENTS

<u>School District</u>	<u>1976 Enrollment</u>	<u>Kincheloe AFB Dependents</u>	<u>Percent</u>
Brimley	556	100	18.0
Pickford	521	78	15.0
Sault Ste. Marie	5,134	1,161	22.6
Rudyard	2,167	1,553	71.7
St. Ignace	1,150	37	3.2
Total	9,528	2,929	30.7

The Rudyard School District presently has the greatest enrollment of Kincheloe dependent children and maintains the on-base schools. This school district would lose approximately 94% of its military dependent enrollment and 67.3% of its total enrollment. According to the Superintendent of the Rudyard School System, the two schools on base would be closed at completion of this action. Two other schools in the area may also close. The Superintendent estimates that 160 of Rudyard's 230 school teachers would lose their jobs and that the school system payroll would be reduced by 68%. These figures seem reasonable and proportional to the 67% loss in enrollment.

The school districts of Brimley, Pickford, and Sault Ste. Marie would each lose between 15 and 22% of their total enrollment.

#### PUBLIC SCHOOL FUNDING (AFERN 4.3.3.8)

Current entitlements from PL 81-874 for the five affected school districts total \$1,046,700. Section 3(e) of the law provides for 90% funding of school districts in which there has been a decrease in Federal activities, in which total average daily attendance (ADA) was under 90% of previous year's ADA, and in which ADA of base dependents equaled at least 10 children and 10% of the total enrollment. Under these criteria, four of the five school districts would be eligible for 90% funding for three years following the action.

The 1977 entitlement for Brimley, Pickford, Sault Ste. Marie, and Rudyard would be equal to 90% of the 1976 entitlement, with 1978 being equal to 90% of 1977 and 1979 being equal to 90% of 1978. Therefore, the loss of PL 874 funds would not significantly impact that portion of school district revenues. A greater impact would occur, however, in the level of state operating aid going to the local school districts. This state operating aid is based largely on a per capita formula. Since the school districts would lose a substantial portion of their population and enrollment, they would also lose a portion of their state operating aid. For example, the Rudyard School District in FY 1976 budgeted \$1.6 million as revenue from state sources (a per capita amount of \$763.92), representing 53.9% of its general fund revenues. The estimated loss of 1,460 Kincheloe dependents from the Rudyard School System would result in a state operating aid loss of \$1.12 million or 36% of the budget.

#### HIGHER EDUCATION (AFERN 4.3.3.5)

Lake Superior State College, located in Sault Ste. Marie, has a current enrollment of 2,200. This includes approximately 385 students who are Kincheloe personnel and dependents and attend classes off base. Additionally, over 2,000 military personnel and dependents were enrolled in on-base courses in 1975. Since on-base courses are financed by tuition paid on base, it is likely that there would be an impact on the college's finances from a closure of Kincheloe. Total off-base enrollment would be decreased by 17.5%.

#### MEDICAL (AFERN 4.3.4)

An informal agreement exists between Kincheloe and the residents of Rudyard, Pickford, and Kinross which permits civilian emergency patients to be treated at the base

hospital if they are closer to the base than hospitals at Sault Ste. Marie or St. Ignace. This benefit to the local community would be lost if the base were to be closed.

COMMUNITY SERVICES AND FACILITIES (AFERN 4.3.5)

POLICE (AFERN 4.3.5.1)

Various agreements exist between base police and the Chippewa County and local police departments for mutual aid. This benefit to the local community would be lost if the base closed.

FIRE PROTECTION (AFERN 4.3.5.2)

Mutual aid agreements exist between the Kincheloe Fire Department and the fire departments of Sault Ste. Marie, Pickford, Rudyard, Clark Township, and the Michigan Department of Natural Resources. These benefits would be lost to the local community if the candidate action were carried out.

AIR TRAFFIC CONTROL

Kincheloe AFB provides air traffic control for the Sault Ste. Marie, Michigan County Airport, and the Sault Ste. Marie, Ontario, Federal Airport. These activities would have to be taken over by another entity if the closure action were to be implemented.

MILITARY RETIREES

As of December 31, 1975, there was a total of 325 retired personnel residing in the two-county impact area. Of these 173 were retired Air Force personnel who had an estimated annual retirement income of \$1.2 million.

It is anticipated that if Kincheloe were closed, some of these 325 retired people would leave the impact area since they would no longer have access to medical, BX, and commissary facilities. However, price differentials on many retail items purchased off-base compared to those on base are minimal. The CHAMPUS program, a medical insurance program which provides for a 75% reimbursement after payment of a \$100 deductible fee for a retired family of two, would to some extent cover additional financial costs for medical services obtained at civilian facilities by military retirees.

ACTIVITY SYSTEMS AND PLANS (AFERN 4.4)

TRANSPORTATION (AFERN 4.4.1)

OFF BASE (AFERN 4.4.1.2)

AIR TRANSPORTATION (AFERN 4.4.1.2.1)

The two civilian airports of significance within the area, City-County Airport of Sault Ste. Marie MI and Sault Ste. Marie Federal Airport of Sault Ste. Marie CN receive no direct military use from the base. Since the base accounts for about 30% of Chippewa County's total population as well as numerous business contractors in the area, the indirect use by base personnel and dependents of the civilian airports may be significant.

RAIL TRANSPORTATION (AFERN 4.4.1.2.2)

Only a relatively small amount of freight and coal is shipped by rail to the base for its heating plant. Only 2% of the Soo Line Railroad's yearly business is directly with Kincheloe AFB. No railroad passenger service exists in the State of Michigan. Therefore, closing the base would have a very minor impact on railway transportation.

HIGHWAYS (AFERN 4.4.1.2.3)

Traffic studies for both the City of Sault Ste. Marie and Chippewa County indicate that the existing highway system in the area, which includes Interstate 75, serving the base is more than adequate to handle present traffic volumes. There are no plans for highway expansion in the immediate vicinity of the base. Plans to upgrade the quality of some roads within Chippewa County as well as the addition of safety measures, such as breakaway sign posts on I-75, have no direct relationship to the base.

The Eastern Upper Peninsula Transportation Authority which manages the bus terminal in Sault Ste. Marie recently invested \$42,000 in extra facilities and equipment to support the requirements of the base. Kincheloe AFB accounts for about 39% of the yearly passenger service and 23% of the yearly freight service. In addition, a Dial-A-Ride bus service, a joint Federal and local government project, operates in Sault Ste. Marie with about 250 rides per day. Closing the base would have an effect on the St. Ignace bus depot since about 10% of its monthly business of \$3,000 is directly attributed to base personnel.

UTILITIES (AFERN 4.4.2)

Aircraft fuel consumption, Aerospace Ground Equipment (AGE) fuel consumption, and electricity consumption would all be expected to decrease at Kincheloe AFB as a result of decreases in the number of aircraft and personnel. Since existing

structures would be vacated, the base heating and cooling load, and natural gas, coal and fuel oil consumption are expected to decrease significantly. Consumption of coal should decrease by 17,600 ton/yr, natural gas by 294 million cubic feet (mcf)/yr, fuel oil by 425,000 gallons (gal)/yr. The impact should be favorable.

#### CIVILIAN COMMUNITY UTILITIES (AFERN 4.4.2.1)

Water used on base and in the surrounding area is from wells with the exception of the communities of Sault Ste. Marie, Cedarville, and St. Ignace, which are serviced by water companies. The effect of the base on the Cedarville and St. Ignace water companies is negligible. Demand by off-base households of base personnel for water from the Sault Ste. Marie Water Department is approximately 37.2 million gal/month. Current area capacity is 828.0 million gal/month; current total demand is 103.6 million gal/month. No significant impact on this utility is expected from a base closure. Plans for future expansion are unknown but would be affected by the action.

Kincheloe AFB has its own sewage treatment plant. The only sewage treatment plants in the area are in Sault Ste. Marie and St. Ignace. The effect of a base closure on the St. Ignace plant is negligible. Of the four million gallon-per-day current total demand of the Sault Ste. Marie sewage treatment plant, the demand by off-base households of base personnel is unknown. However, future plans to install new sewer lines and an active sludge system may require reevaluations to determine the effect of population losses to the area if the base closes.

The Edison Sault Electric Company would lose approximately \$300,000 per year if the base closes. In addition, it would lose revenue from hotels, motels, and other commercial establishments which would be forced to close if Kincheloe AFB closes. In addition to the Edison Sault Electric Company, the Cloverland Electric Company supplies off-base uses connected to the base with about 119,484 KWH/mo. The Young Electric Company of St. Ignace also does 15% of its business with Kincheloe AFB.

Natural gas sales by the Michigan Consolidated Gas Company would be affected by both the loss of gas sales directly to the base and by the loss of sales to customers now employed at the base. In 1975 the revenue from military purchase of natural gas totaled \$280,902; these revenues would be lost with a base closure. In addition,

there would be an impact on employment. The Air Force has a guarantee payment contract with the gas company for an extended period of time. This contract specifies that the Government shall pay the Michigan Consolidated Gas Company as liquidated damages an amount not to exceed \$375,000.

The two telephone companies in the area, Michigan Bell Telephone and General Telephone, would both lose a considerable amount of business with a closure of Kincheloe AFB. Michigan Bell Telephone would lose \$9,000/month from the official use of Air Force telephones on base. In addition, it would lose over 350 off-base customers.

LAND USE (AFERN 4.4.3)

See Chapter II of this statement.

AIR OPERATIONS CHARACTERISTICS (AFERN 4.5)

Implementation of the candidate action would reduce air operations to zero at Kincheloe AFB.

#### IV. EVALUATION OF ALTERNATIVES

##### A. DESCRIPTION OF ALTERNATIVE ACTIONS

###### BASES CONSIDERED

All active Air Force bases currently supporting SAC aircraft operations were initially screened for possible reduction or closure.

###### SELECTION CRITERIA

The following criteria were used during this evaluation of all B-52 and KC-135 installations:

The strategic bomber and tanker force must be responsive to worldwide Joint Chiefs of Staff tasking and, therefore, based to support the primary mission of the Strategic Air Command in support of national policies and objectives.

Missions utilizing specialized facilities or required to be stationed in a specific geographic location for military reasons must be retained.

Excess base support capacity must be reduced to generate maximum near-term savings.

Anticipated future force adjustments (both new equipment and retirement of older equipment) must be taken into account.

Bases with a capacity for expanded primary mission activities or which currently host other major command missions (a multi-mission base) should have a higher priority for retention.

Bases supporting strategic missile forces must be retained owing to the extensive nonrelocatable facilities involved.

Military Construction Program (MCP) costs should be minimized. Therefore, installations with extensive facility deficiencies will have lower priority for retention and actions taken should generate minimum MCP requirements at other installations.

The relative impact on the human environment of the candidate action must be taken into account, along with the other criteria set out herein. These criteria are consistent with current Air Force policy to streamline operations by using innovative organizational and managerial methods.

### APPLICATION OF CRITERIA

Robins AFB, GA, Seymour Johnson AFB, NC, Mather AFB, CA, Travis AFB, CA, Altus AFB, OK, and Little Rock AFB, AR are installations supporting major Air Force missions in addition to strategic bombers and tankers. Strategic Air Command is a tenant at each of these six installations. Air Force Logistics Command is the host command at Robins AFB, supporting a major Air Logistics Center with extensive dedicated facilities. Robins AFB also hosts Air Force Communications Service units, Air Force Reserve Headquarters, and several reserve units. The host command at Seymour Johnson AFB is the Tactical Air Command with approximately 70 tactical fighters assigned. Mather AFB, hosted by Air Training Command, supports a Navigator Training Wing equipped with T-43 aircraft and, in the near future, will support aircrew training for Navy undergraduate navigators in addition to an Air Reserve Force KC-135 unit. Military Airlift Command is the host at Altus, Travis, and Little Rock AFBs. Altus is the location of the C-5 and C-141 military airlift training squadrons. Travis AFB is a major West Coast air terminal for personnel and logistics movement to the Pacific area and also supports extensive Reserve force flying activities. A SAC strategic missile wing is located at Little Rock AFB as well as a Military Airlift Wing with approximately 87 C-130 aircraft assigned. Inactivation of a SAC wing or squadron and withdrawal of bomber and tanker missions from any of these six bases would not produce significant savings because of the substantial mission elements which would remain; therefore, they were eliminated from further study.

McConnell AFB, KS, Grand Forks AFB, ND, Minot AFB, ND, and Ellsworth AFB, SD support strategic missile wings as well as strategic bombers and/or tankers. The geographical location of each of these bases is ideal for supporting a strategic mission. A reduction of strategic bombers and tankers at any of these locations would not permit maximum savings since the base operating support element must be retained to support the strategic missile mission which could not feasibly be relocated. Ellsworth AFB, with excellent facilities, has the capability of accepting additional aircraft. These bases, therefore, were eliminated from further consideration.

Carswell AFB, TX, Dyess AFB, TX, and March AFB, CA all support B-52D and KC-135 aircraft. All three Strategic Air Command bases support a major Air Force mission in addition to a strategic bomber and tanker mission. Carswell AFB, in addition to supporting two B-52D and one KC-135 squadron, supports Air Force Plant No. 4 and trains all B-52D combat crews for the entire Air Force.

Air Force Plant No. 4, an industrial plant for the design, development, and high rate production of aerospace weapon systems, is contiguous with Carswell AFB to the east and jointly uses airfield facilities of that base. In addition, Carswell and March AFBs support Air Reserve Force flying units, and Dyess AFB hosts a C-130 Tactical Airlift Wing. The geographical location of each of these bases provides excellent operational flexibility. Their proximity to several tactical fighter units enhances the command capability to provide lateral air refueling support in the Southwest United States. Each base has excellent facilities with a capacity for more aircraft than other smaller installations. These three bases were eliminated from further study.

Pease AFB, NH and Plattsburgh AFB, NY support both FB-111 and KC-135 operations. Closing these bases would require the redistribution of FB-111 aircraft. Because the FB-111 requires unique facilities such as flight simulator, avionics test stations, and stationary sound suppression equipment not available at other locations, the MCP resulting from a redistribution of aircraft would require large dollar expenditures. The geographical locations of both bases provide operational flexibility for employment of strategic forces in both a EWO and conventional role. Due to the operational application of the FB-111 weapon system, it is essential that this aircraft be located in the Northeastern United States because of accessibility to specially targeted areas. Both installations are capable of holding large numbers of aircraft and are considered operationally essential. Pease AFB and Plattsburgh AFB were thus eliminated from further consideration.

A review of the potential economics of relocating U-2 aircraft from Davis Monthan AFB, AZ to Beale AFB, CA and assigning the management of high altitude manned reconnaissance missions to one organization was initiated in July 1975. The criteria used for this review were cost effectiveness and feasibility. Results indicated that transfer of B-52G aircraft to other locations would provide room at Beale AFB for U-2 aircraft now at Davis Monthan AFB. The redistribution of B-52G aircraft would take advantage of existing facility capabilities at various installations and permit the Air Force to avoid extensive construction costs. Other benefits to be realized are improved efficiency by combining management of high altitude manned reconnaissance resources within the strategic reconnaissance wing at Beale AFB enhanced training effectiveness, increased general intelligence support, and better use of manpower and material resources.

Therefore, Beale AFB, CA, was eliminated from further consideration. Davis Monthan AFB is a strategic missile base scheduled to be turned over to Tactical Air Command on 1 October 1976.

Offutt AFB, NE, is the location of Strategic Air Command Headquarters which requires a substantial, difficult-to-replace, command control communications network. Any relocation of this headquarters would be costly and involve significant difficulties to avoid disruption of the command control functions. Additionally, several tenant organizations are housed on Offutt AFB such as the 55th Strategic Reconnaissance Wing maintains several different types of reconnaissance and airborne command and control aircraft. Cost to duplicate the facilities at Offutt AFB would be prohibitive and, therefore, substantially increase the one time cost of reducing this installation. Offutt AFB was not given further consideration.

Barksdale AFB, LA has the largest number of B-52G and KC-135 aircraft assigned of any strategic bomber and tanker base. Tankers assigned to this installation play a key role in SAC's air refueling mission, particularly lateral command support. A Strategic Air Command Numbered Air Force Headquarters is located at Barksdale AFB. Additionally, one of the major Air Force weapons storage areas is located at Barksdale AFB, and the base hosts extensive Air Reserve Force flying activities. Cost to duplicate the facilities at Barksdale AFB would be prohibitive and therefore, substantially increase the one-time cost for reducing this installation. For these reasons, Barksdale AFB was eliminated from further study.

Fairchild AFB, WA, was eliminated because of its geographical location. One B-52 squadron and two KC-135 squadrons are needed at Fairchild AFB to support military operations against specially targeted areas which are more readily accessible from this geographical region. Other military installations are not available in this geographical region to offset or replace the facilities at Fairchild AFB. Additionally, the Air Force Survival School and Air National Guard KC-135 unit programmed for Fairchild AFB would still have to be supported or relocated, and the facilities would require expensive military construction to be duplicated at another location. Fairchild AFB was eliminated from further study for the reasons cited.

Castle AFB, CA, is currently utilized as the Combat Crew Training location for all B-52G/H and KC-135 crew members. Facilities are excellent, and the installation has the

capacity for increased mission. The 84th Fighter Interceptor Squadron (FIS) (Air Defense Command) with 18 F-106 aircraft is also located at Castle AFB. Operational considerations for the Combat Crew Training Squadron, expansion capability, and excellent facilities led to eliminating Castle AFB from further study.

Rickenbacker AFB, OH, has multiple missions assigned: an active Air Force strategic tanker wing and Air National Guard tactical fighter squadron with 18 A-7 aircraft, an Air National Guard air refueling squadron with eight KC-135 aircraft, and two Air Force Reserve tactical airlift squadrons with 32 C-123 aircraft. Relocation of the units at Rickenbacker AFB would require extensive military construction. Additionally, the Air Reserve Forces would be denied an area with a large recruiting potential and, consequently, could suffer from a loss of available manpower. For these reasons, Rickenbacker AFB was eliminated from further consideration.

Grissom AFB, IN, is a centrally located tanker base which provides SIOP utility and lateral command air refueling support. Grissom AFB is an excellent operational and geographical location for six assigned airborne command and control aircraft. In addition to strategic tankers, 42 A-37 aircraft of the Air Force Reserves are located at Grissom AFB. The closure of Grissom AFB would require the relocation of its strategic mission and the Air Force Reserve. For the reasons iterated, Grissom AFB was eliminated from further consideration.

Griffiss AFB, NY, a multi-mission base, has strategic tanker and bomber forces which provide operational flexibility for employment in both a SIOP and conventional role because of the base's geographical location. Withdrawal of these assets could be accommodated, from an operational point of view, without jeopardizing operational flexibility only if a strategic bomber and tanker mission were to be retained at Loring AFB, ME. It is essential that a portion of the strategic bomber and tanker force be located in the Northeastern United States region because of accessibility to specially targeted areas. Other military installations are not available to offset a reduction of strategic forces from both Griffiss and Loring AFBs. Since the Rome Air Development Center (AFSC), Northern Communications Region (AFCS), and the 49th FIS with 18 F-106 aircraft (ADC) are tenant units at Griffiss AFB, the base is a multi-mission installation. Each of these unit's activities are considered essential; therefore, if Griffiss AFB were to be closed, these activities would need to be relocated to other installations thereby

incurring excessive costs. For these reasons Griffis AFB was eliminated from further consideration.

The strategic bomber and tanker forces located at K. I. Sawyer AFB, MI, provide excellent flexibility to the EWO. In addition to the strategic bomber and tanker force, K. I. Sawyer is a multi-mission base, supports 18 F-106 aircraft assigned to Air Defense 87th FIS Command. This unit provides an air defense posture in the Central United States that is essential. Closure of K. I. Sawyer AFB would require relocating the F-106 aircraft to a base in the same geographical area. Currently, K. I. Sawyer AFB has 16 B-52H and 20 KC-135 aircraft assigned. Facilities are available and the base could accept an additional four B-52H aircraft. This capability provides a flexibility at K. I. Sawyer AFB which is not available at Kincheloe AFB. For these reasons, K. I. Sawyer AFB is considered operationally essential and, therefore, eliminated from further study.

Loring AFB, ME, has been identified as a candidate for reduction to a forward base status. The 14 B-52G aircraft would be relocated to remaining installations that support the same weapons system. The 30 KC-135 aircraft assigned to Loring AFB would be transferred to the Air Reserve Forces. Selected tenant organizations would be retained because of special mission requirements and a strategic wing activated to maintain the base as a forward operating location supporting day-to-day alert operations and capable of supporting contingency operations. Loring AFB was eliminated from further consideration for closure.

Blytheville AFB, AK is one of four B-52G/H bases that is not multi-mission. Loring, Kincheloe, and Wurtsmith AFBs are the others. Strategic forces assigned to Blytheville AFB provide excellent operational flexibility owing to geographical location. Additionally, the current bomber and tanker mission at Blytheville AFB is considered essential because the tankers support lateral command air refueling requirements in the Southeastern region of the United States. The proximity of Blytheville AFB to large tactical fighter installations provides for more economical air refueling support to these forces while keeping the tankers positioned to support the bomber force. At the same time, the bomber aircraft are located sufficiently close to primary target areas for effective utilization. The facilities at Blytheville AFB are in generally good condition. Blytheville AFB, a small installation when compared to other Strategic Air Command bases, is also one of the least costly to operate. A factor which contributes to the reduced cost of operating Blytheville AFB,

when compared to bases of similar size and mission, is favorable climatic conditions. The net savings realized from closing Blytheville AFB would be less than by closing Kincheloe AFB. For the reasons cited, Kincheloe AFB appears to be a more attractive candidate for closure, so Blytheville AFB was not selected as a primary candidate for closure. Blytheville AFB was, however, examined in greater detail as an alternative because it is a single mission base.

Wurtsmith AFB is another of the B-52G/H bases that does not have a multi-mission. The geographical location at Wurtsmith AFB provides excellent flexibility and the facilities are in generally good condition. Currently Wurtsmith AFB has 16 B-52H and 16 KC-135 aircraft authorized.

Climatological conditions are more favorable at Wurtsmith than at Kincheloe. For example, the annual mean snowfall is 58 inches per year compared to 107 inches per year at Kincheloe. Since heavy snowfalls are a less frequent occurrence at Wurtsmith than at Kincheloe, fewer operational restrictions and mission degradations are experienced. Additionally, the wind chill factor, an important factor in winter operations on the flightline, reaches the critical point less frequently at Wurtsmith. Due to operational considerations, weather and condition of facilities, Wurtsmith is a less attractive candidate for closure than Kincheloe. However, since Wurtsmith is a single mission base, it was examined in greater detail as an alternative.

A related action is the proposed reduction of Loring AFB, Maine. In that proposal, Wurtsmith AFB is also considered an alternative. The strategic bomber and tanker forces at both Kincheloe and Wurtsmith are in a geographical location that provides excellent flexibility in the SIOP. Withdrawal of forces from either of these bases could be accommodated without an insurmountable impact upon strategic capability but the closure of both is not considered acceptable. Thus if Wurtsmith were to be selected for closure as an alternative to the proposed Loring reduction, then Kincheloe would not be considered for closure. Since Kincheloe is a single-mission base which lacks expansion capability without considerable expenditures, it was identified as a candidate installation for closure. Although Kincheloe has some modern facilities, others need to be repaired or replaced which would mean an extensive rehabilitation program must be undertaken to support the present mission. The current base loading of 16 B-52H and 16 KC-135 aircraft is considered maximum. The petroleum, oil, and lubricant facilities are at full capacity and would require expansion to accept additional missions. To expand facilities to accept added missions or to upgrade existing facilities, large capital investments through military construction funding would be required during FY 78-82. Geographical location and annual weather profile make the base unsuitable to support other missions such as airlift, training, or tactical fighter operations. The foregoing considerations resulted in the nomination of Kincheloe AFB as a candidate for closure.

CANDIDATE ACTION

Inactivate the 449 BMW and its supporting organizations and close Kincheloe AFB MI by end FY 77, declaring the base excess to Air Force requirements. The details of this action can be found in Chapter I.

Alternative No. 1.

Relocate active forces and activities presently assigned to Wurtsmith AFB and close the base by end FY 77.

The assigned aircraft would have the same disposition as the candidate action. The FY 4/77 Wurtsmith manpower authorizations of approximately 2,700 military and 750 civilian positions would be eliminated. Approximately 320 caretaker manpower positions would be retained until completion of existing actions.

Alternative No. 2.

Relocate active forces and activities presently assigned to Blytheville AFB and close the base by end FY 77. The assigned aircraft would have the same disposition as the candidate action providing that the decision is made to reduce Loring AFB to a forward operating base. In the event that Loring AFB is not reduced, the 14 B-52Gs would be redistributed to nine other locations. The KC-135 aircraft would still be transferred to the Air Reserve Forces. The FY 4/77 Blytheville AFB manpower authorizations of about 2,480 military and 650 civilian positions would be eliminated. Approximately 320 caretaker positions would be retained until completion of excessing actions.

Alternative No. 3.

No action or status quo is the third alternative and is not desirable. It fails to achieve the necessary savings and manpower reductions and reduction of excess basing capacity.. It fails to respond to both Administration and Congressional mandates to reduce support activities including overhead and base operation support functions, as evidenced, for example, in the President's Budget and Senate Armed Services Report No. 94-146, May of 1975. The Air Force review of its missions revealed that force admustments would permit the Air Force to consolidate units and reduce the number of active strategic bomber and tanker bases. These adjustments include transferring the aircraft resources of one B-52 squadron to nonoperating active status, deleting the associated manpower, and accelerating the previously announced transfer of 128 KC-135 aircraft to the Air Reserve Forces. Additionally, the Air

Force has insured that our strategic bomber and tanker forces are able to survive and retaliate in light of the current threat and world conditions.

Thus, "no action" fails the criteria of excess capacity reduction and the generation of savings. It satisfies the retention of expandable facilities criterion but at the cost of the criteria discussed above. It shows no responsiveness to programmed force adjustments. In the light of the criteria and objectives addressed in this review, the "no action" option is unsatisfactory.

B. EXISTING SITE CHARACTERISTICS OF ALTERNATIVES:

This section provides a general description of the existing (baseline) environment of Wurtsmith and Blytheville AFBs and the surrounding communities.

1. Wurtsmith Air Force Base Area

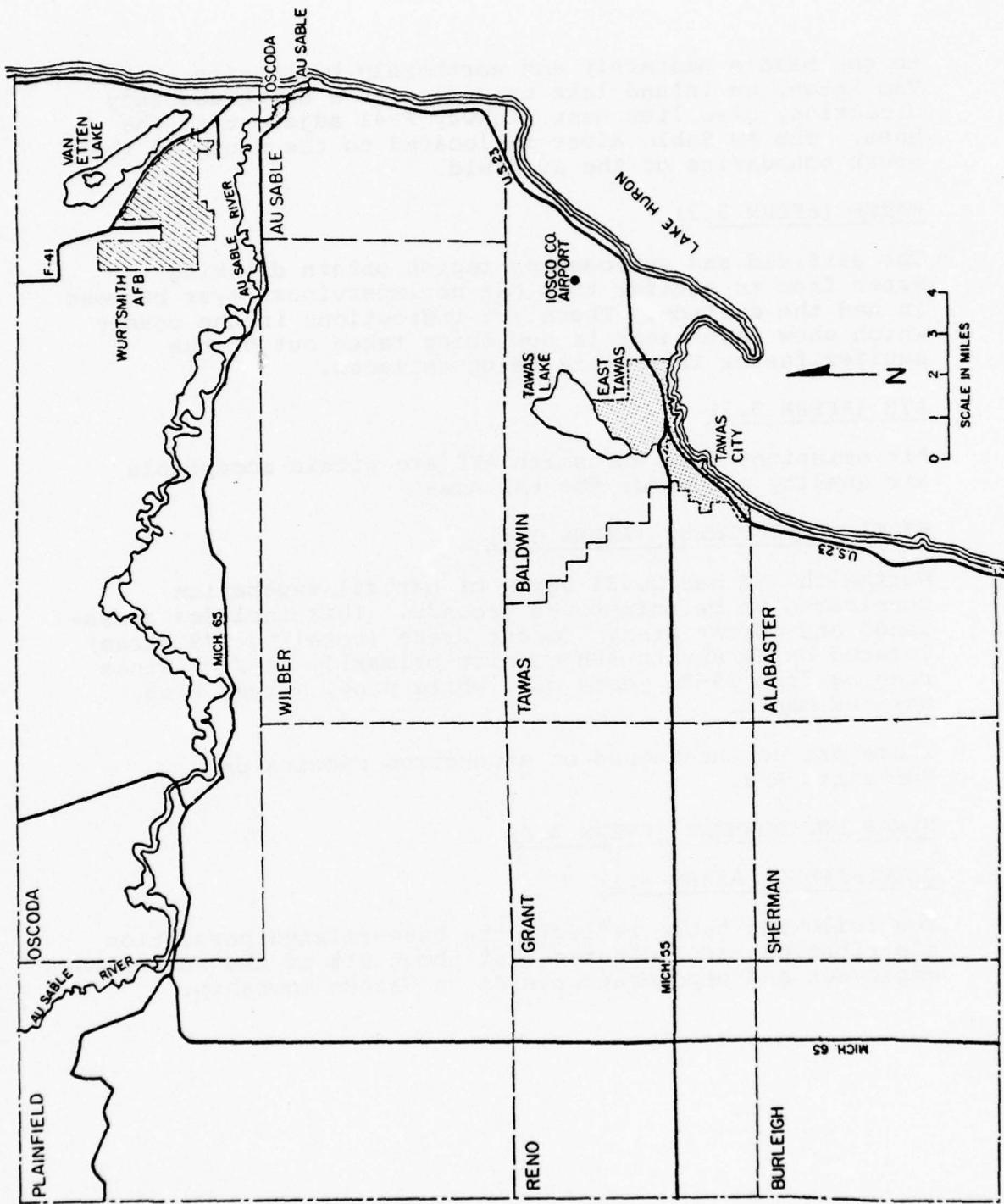
Wurtsmith AFB is located near Lake Huron just north of Oscoda-Au Sable, approximately 16 miles north of the twin cities of Tawas and East Tawas. The region which would be impacted by a closure of Wurtsmith AFB is defined as Iosco County. This area was selected because it represents the most reasonable region receiving significant influence from the base. As of 31 March 1976, Wurtsmith AFB employed approximately 3900 people consisting of 3100 military and 800 civilians (490 Department of Air Force, 140 Nonappropriated Fund and 80 Army/Air Force Exchange Service and 90 contractor employees). The total annual payroll is approximately \$35.2 million (this includes only military and civil service employee payrolls).

Base payroll is 24.1% of the total personal income of the area of influence which is estimated to be about \$146.3 million.

NATURAL ENVIRONMENT (AFERN 3.0)

EARTH (AFERN 3.1)

The airfield is located on a nearly level sand plain. The airfield is surrounded by scattered second growth timber dominately Jack Pine in association with small oak and aspen. Michigan Highway F-41 parallels and is adjacent



- Wurtsmith AFB and Vicinity. Tosco. County

to the base's easternly and northernly boundaries. Lake Van Ettan, an inland lake extending in a northeasterly direction, also lies near Highway F-41 adjacent to the base. The Au Sable River is located to the south of the south boundaries of the airfield.

#### WATER (AFERN 3.2)

The airfield and surrounding region obtain drinking water from an aquifer that has no impervious layer between it and the surface. There are indications in the county which show that water is now being taken out of the aquifer faster than it is being replaced.

#### AIR (AFERN 3.3)

Air emissions from Wurtsmith AFB are within acceptable air quality standards for the area.

#### BIOTIC ENVIRONMENT (AFERN 3.4)

Wurtsmith AFB has 2,433 acres of natural vegetation considered to be unimproved grounds. This includes grasslands and forest area. Forest areas (totaling 289 acres) located on Wurtsmith AFB consist primarily of Jack Pines ranging from 25-30 years old, white pine, Norway Pine, oak and maple.

There are no threatened or endangered species on Wurtsmith AFB.

#### HUMAN ENVIRONMENT (AFERN 4.0)

##### DEMOGRAPHIC (AFERN 4.1)

The following table reflects the base-related population distribution and indicates that about 91% of the Wurtsmith employees and dependents reside in Oscoda Township.

ESTIMATED 1975 POPULATION DISTRIBUTION  
IN WURTSWICH AFB IMPACT AREA (IOSCO COUNTY)

<u>JURISDICTION</u>	<u>TOTAL POPULATION</u>	<u>WURTSWICH EMPLOYEES AND DEPENDENTS</u>
Oscoda Twp	12,100	8,700
Tawas-East Tawas	4,900	2,40
Others	10,500	5 80
County Total	27,500	9,5.20

The local area population has been greatly affected by the growth of Wurtsmith AFB. While the base has been continuously active since 1947, a major expansion to accommodate a SAC bombardment wing which took place during 1958 to 1960 probably had the greatest effect on local community growth. This change is reflected in the following table.

<u>Location</u>	<u>POPULATION CHANGE BY LOCATION</u>			<u>Change</u>	<u>Change</u>
	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1950/60</u>	<u>1960/70</u>
Oscoda	843	4,202	4,870	39.8 %	16 %
Tawas/E-Tawas	3,481	4,212	4,038	21 %	-4 %
Iosco County	10,906	16,505	24,905	51 %	55 %

ECONOMIC CHARACTERISTICS (AFERN 4.2)

The growth of Iosco County began with fishing settlements along the shores of Lake Huron and Saginaw Bay. The manufacturing of timber soon sprang up along the Au Sable River and, with the addition of rail lines in the 1850's, became the major industry of Iosco County. The only other industry to contribute significantly to the county's economic base before the 1920's was the quarrying of gypsum.

The two largest communities in the county, Oscoda and Au Sable, were destroyed by fire in 1911, and the economy never fully recovered from the disaster. Even today, there is very little industry of any kind in the county. The primary source of income is the tourism and recreation industry related to Lake Huron and Saginaw Bay and focused almost entirely around Tawas; Wurtsmith Air Force Base is the major employer of the county's population.

In 1975 the civilian labor force in Iosco County averaged 11,775 persons or 43% of the total population.

In 1975, unemployment within Iosco County averaged 1,725 persons, or 14.7% of the civilian labor force. During the year, the civilian unemployment rate fluctuated between 12% in August to 17% in February. These rates are more than twice the normal unemployment rate average during nonrecession years.

Of the total military and civilian employment of 3,850, there are an estimated 160 employees at Wurtsmith AFB who hold second jobs in the region. Additionally, an estimated 540 military and dependents hold jobs in the region.

#### PUBLIC FINANCE (AFERN 4.2.3)

There is a total of \$867,000 paid to local school districts annually as a result of Public Law (PL) 81-874, Federal School Impact Assistance. The major sources of revenue are related to population base and income levels and include sales taxes, cigarette taxes, gas taxes, and real estate property tax.

#### CAPITAL IMPROVEMENT (AFERN 4.2.3.5)

There is a total of over \$13.5 million in state and local capital improvements planned or underway in the impact area as of April 1976.

#### BASE PROCUREMENT (AFERN 4.2.4)

In addition to the payroll generated at the base, local procurements also contribute to the regional economy. Estimated local procurements consist of base exchange, commissary, supplies, services, and construction awards totaling over \$2 million in 1975.

#### HOUSING (AFERN 4.2.5)

According to the 1970 Census of Housing, there were 13,937 housing units within Iosco County, of which 10,609 were considered year-round units. Based upon building permit activity during 1970-1974 and estimates of demolitions, it is estimated that there are now 14,900 units (1975), of which 11,580 are year-round units. Since 1970, the number

of vacant, year-round units has increased from 3,282 to 3,380 units. The number of occupied housing units has increased from 7,327 in 1970 to 8,200 units in 1975. The number of building permits issued in Iosco County since 1970 has averaged 300 units annually. The loss of housing to age, disaster, or demolition is estimated to average about 1% of the current housing stock each year. Wurtsmith AFB personnel occupy 1355 family housing units on base and approximately 1000 units off base in Iosco County.

#### INSTITUTIONAL CHARACTERISTICS (AFERN 4.3.1)

The nearest local government is the Oscoda Township Council, a chartered Township administered by a supervisor and board of four trustees.

Other jurisdictions are: Alabaster, Au Sable, Baldwin, Burleign, Grant, Plainfield, Reno, Tawas, and Wilber Townships; Iosco County Board of Commissioners; East Tawas City (Mayor); Tawas City (Mayor); Whittemore (Mayor); Iosco County Intermediate School District; Hale Area Schools; Tawas Area Schools; Whittemore-Prescott Area Schools; Iosco County Agriculture Stabilization and Conservation Service.

The local communities, i.e., Oscoda, Tawas, East Tawas, Hale, Whittemore, Au Sable, etc., while politically autonomous, are administered by districts under the County Board of Commissioners.

The zoning ordinances of Oscoda and Au Sable were established and adopted jointly on 5 October 1964, in accordance with Act 184 of the Michigan Public Acts of 1934 as amended. This zoning ordinance contains 27 articles. These articles define various types of districts, and limit the type and size of buildings and structures which can be built in each district. A Township Zoning Board has been established to carry out the provisions of the ordinance, as well as a Board of Appeals to hear appellate grievances.

#### EDUCATION (AFERN 4.3.3)

Total public school enrollment for the region was 5,496. Of this amount, dependents of Wurtsmith AFB employees accounted for 27.4% of the total enrollment. The total PL 81-874 students numbered 1,508. Total private school enrollment for the area was 166, with base dependents numbering only one.

No college or university is located in Iosco County.

MEDICAL (AFERN 4.3.4)

The St. Joseph Hospital, consisting of 62 beds and located in Tawas City, is in the planning stage of a \$600,000 expansion program designed for early cancer detection. This facility will house a new nuclear medicine section.

Wurtsmith AFB has a 20 bed short-term acute care hospital. Services offered include Internal Medicine, General surgery, Pediatrics, and OB/GYN.

The hospital serves approximately: 66.0 retired out-patient visits; 20 retired in-patient visits; 4,400 active duty out-patient visits; and 10.0 active duty in-patient visits per month (including dependents).

Future plans for expansion of base facilities include an estimated \$8.9 million project to double the square footage of the hospital thus increasing administrative and clinic space, including additional medical and dental examination rooms and patient waiting area. The addition is required to meet new health planning criteria and will take approximately three years to complete.

COMMUNITY SERVICES/FACILITIES (AFERN 4.3.5)

The existing socio-economic environment pertaining to community services and facilities can be characterized as a complementary relationship between the local civilian community and the base. In the area of fire protection, Wurtsmith AFB and many of the local communities have mutual aid agreements. These mutual aid agreements permit the parties involved to assist each other in fire protection activities. Additionally, the base facilities have served as an extension of the local community facilities. For example, several members of the base fire department are members of volunteer fire departments in the local communities.

In the area of cultural and recreational opportunities, both the base and the local communities benefit from interaction with each other. Military personnel and their dependents contribute to expanding the cultural horizons of local residents because of their travels and exposure to other cultures. In addition, many military-related personnel are active in local community affairs and activities.

In turn, communities surrounding Wurtsmith AFB have willingly integrated Air Force personnel into their communities and have shared with them the cultural and recreational opportunities of their communities. Wurtsmith AFB has a diversified morale, welfare, and recreation program, and the facilities to supplement those which are available in the local communities.

#### ACTIVITY SYSTEMS AND PLANS (AFERN 4.4)

##### TRANSPORTATION (AFERN 4.4.1)

Transportation in the area is severely limited. The primary mode is private automobile. There is no commercial air or rail passenger service to Iosco County. Commercial airports are located 50 miles north and 90 miles south. Bus transportation is limited to one south bound and one north bound departure, per day, by the Great Lakes Greyhound Lines from Oscoda. There is no bus service to the base.

Some freight service is provided the area by the Detroit and Mackinac Railway Company; however, the bulk of the freight movement is by commercial trucking companies.

##### UTILITIES (AFERN 4.4.2)

Various utility systems are in existence to meet the needs of Wurtsmith AFB. The volume of water available is limited by the total capacity of the pumping system which averages 996,000 gallons per day (gpd) with a one day maximum recorded volume of 2,846,600 gallons. The present system is at maximum capacity during summer irrigation demands. New wells and larger pumping capacity would enable expansion.

All industrial wastes pass through settling tank type separations and are removed by contract. Based on capacity and contract requirements, an estimated daily average is 360 gpd. The base treatment plant is operating at about 83% capacity; however, upgrading is necessary to comply with (EPA) 1977 standards; a \$1.3 million project is programmed in the 1977 MCP.

Electrical power is supplied to the base by the Consumer's Power Company, a privately owned utility serving the lower,

middle peninsula areas of Michigan. Based on current demands and the substation capacity, the existing base system could be expanded approximately 44%. Currently the commercial power company is operating at approximately 83% capacity.

The base liquid fuel system consists of the bulk storage area, distribution line and two distribution pump houses. Existing capability is presently limited by the bulk storage capacity plus the transfer pipe line from Alcona Tank Farm. The Alcona transfer line provides a 60% expansion capability.

The disposal of all solid wastes is by the landfill method except for salvageable scrap metals. The on-base landfill is utilized for the cantonment area (base operated) and an off-base landfill is utilized (contractor operated) for the military family housing area. The base landfill has an estimated life of 11 years. The off-base landfill is awaiting State approval, therefore, an estimated life span has not been established.

#### LAND USE (AFERN 4.4.3)

The area is diverse in land use. While there is light industry, the coastal area represented is highly used as a year-round recreation area. In the last decade there has been a noticeable increase in the "retiree" population. A favorite recreation area serving Southern Lower Michigan and many of the states surrounding Michigan, this northeast section of the state is now becoming a prime area for the building of retirement homes for single families and several retiree-apartment complexes. The area has always been a summer resort area and with the increased activity by Department of Natural Resources to restock wildlife and reestablish a Great Lakes Fishery, the past several years have seen a change from "seasonal" to "year-round" resort activity. The upsurge in winter sports strengthens this growth even more. Snowmobiling and cross-country skiing give added impetus to the overall growth of recreation throughout this area.

In this region of influence which totals 360,000 acres there are 12,416 acres of inland water and 242,000 acres of forested land (State and National Forest) which host thousands of hunters each season.

Agricultural activity here consists of 74,498 acres devoted mostly to small farm acreage and cattle grazing lands. There is a relatively small area of 3,911 acres of urban land in the region.

Latest information received from city, township and county officials indicates a continuing strong growth for this area; a population growth ahead of any other areas in Michigan. However, the summary of acreage in Iosco County indicates that it will be many years before population crowding will create any problem for Wurtsmith AFB in the performance of its Air Force mission. There have been no county or township ordinances established dealing with land use noise or environmental problems.

#### AIR OPERATIONS CHARACTERISTICS (AFERN 4.5)

Wurtsmith AFB is located off airways in an area of relatively low traffic density. There are no significant hazards to flight in the local area. The nearest significant hazard is a 1349 TV tower located approximately 60 nautical miles to the north-northwest of Wurtsmith. Wurtsmith is not located on any civil flyways and is minimally affected by light aircraft transiting the Lake Huron shoreline during the summer months. Proposed expansion of facilities and an increase in associated flying activity at Iosco County Airport, located approximately 8 nautical miles to the south, could possibly affect future use of the navigable airspace surrounding Wurtsmith AFB.

#### 2. BLYTHEVILLE AIR FORCE BASE AREA

Blytheville AFB is located in the northeastern tip of Arkansas in Mississippi County. The base is bordered on the west by the town of Gosnell AR and on the southeast by the town of Blytheville AR (pop. about 21,000). The base lies within six miles of the Missouri-Arkansas state border. The communities surrounding the base having the greatest interrelationships with it include Blytheville, Gosnell, and Osceola, a city about 18 miles south (pop. about 7,000).

The region of influence, due to shopping patterns, extends to include the Standard Metropolitan Statistics Area (SMSA) of Memphis TN, a distance of some 75 miles. Since this is beyond the normal commuting distance by the labor force, the region of influence is defined as Mississippi County, including the cities of Blytheville, Gosnell and Osceola.

As of 31 March 1976, Blytheville AFB employed approximately 3500 people consisting of 2800 military and 700 civilians (430 Department of Air Force, 140 Nonappropriated Funds, 80 Army/Air Force Exchange Service and 50 contractor employees). Total annual payroll has been approximately \$31.7 million (this includes only military and civil service employees).

Base payroll is 11.5% of the total personal income of the area of influence which is estimated to be about \$275.7 million.

#### NATURAL ENVIRONMENT (AFERN 3.0)

##### EARTH (AFERN 3.1)

Blytheville AFB is located in the Mississippi River Valley. The terrain is level with some light depressions and rises. Bedrock in the area is sedimentary and made up of limestone and shale. The soils in the area range from sandy loam to clay.

##### WATER (AFERN 3.2)

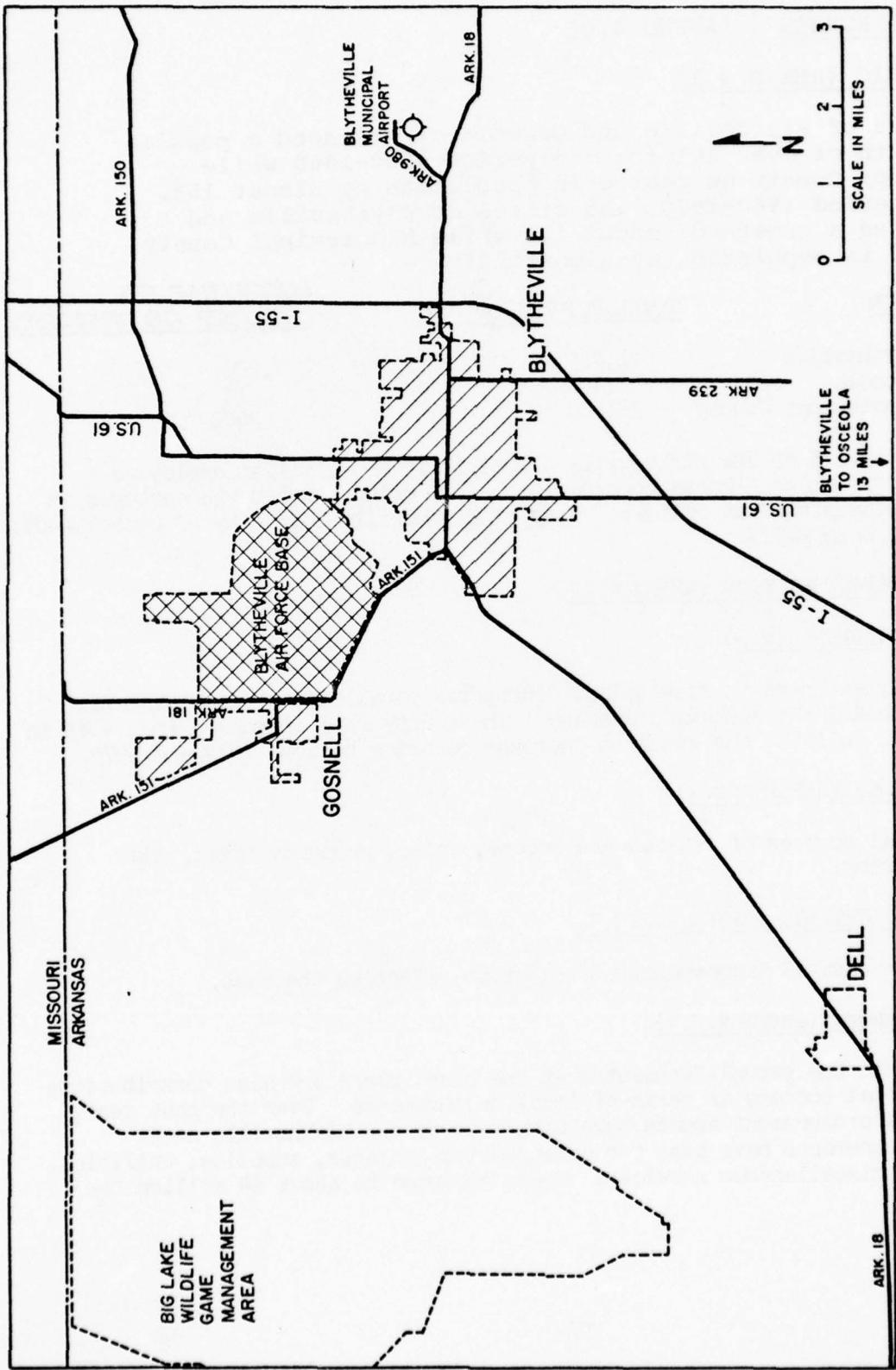
The base and surrounding communities draw their water from the Fort Pillow Sand Aquifer. The water is of very high quality and only requires iron removal treatment.

##### AIR (AFERN 3.3)

The Arkansas Air Quality Control Region (AQCR), in which Blytheville AFB is located, has found that the particulate matter is of significant importance. Blytheville AFB presently contributes approximately 5% of the county's total emissions. There is a sampling location about three and one-half miles from the base.

#### BIOTIC ENVIRONMENT (AFERN 3.4)

The biotic environment of Blytheville AFB contains 3,092 acres of which 538 acres are covered with buildings and pavements, 624 acres are improved land, 1,210 acres are semi-improved land, and 721 acres are unimproved. Overall, the area contains no unique habitat, and low population of game animals. Songbirds are plentiful. No threatened or endangered species of plants or animals are known to occur on the base.



BLYTHEVILLE AIR FORCE BASE  
 BLYTHEVILLE - GOSNELL URBAN AREA

- Vicinity Map, Blytheville AFB, Arkansas

HUMAN ENVIRONMENT (AFERN 4.0)

DEMOGRAPHIC (AFERN 4.1)

The cities of Blytheville and Osceola experienced a population growth of over 20% for the period 1950-1960 while Mississippi County decreased in population by almost 15%. For the period 1960-1970, the cities of Blytheville and Osceola had a growth of about 17% while Mississippi County decreased in population by almost 12%.

<u>JURISDICTION</u>	<u>TOTAL POPULATION</u>	<u>BLYTHEVILLE AFB EMPLOYEES AND DEPENDENTS</u>
City of Blytheville	21,400	4,000
City of Osceola	7,400	10
Rest of Mississippi County	28,600	3000

Approximately 13% of the Blytheville AFB military and civilian employees are nonwhite. These figures compare to the following nonwhite percentages in the local communities as follows: City of Blytheville-28%; City of Osceola-40%; Mississippi County-27%.

ECONOMIC CHARACTERISTICS (AFERN 4.2)

EMPLOYMENT (AFERN 4.2.2)

The unemployment rate in Mississippi County has paralleled national trends but has exceeded the statewide average. The county rate increased from 4.8% in 1970 to 7.2% in 1975, the greatest increase occurring between 1974 and 1975.

PUBLIC FINANCE (AFERN 4.2.3)

The principal sources of revenue are income, sales, property taxes, and revenue sharing.

CAPITAL IMPROVEMENTS (AFERN 4.2.3.5)

There are no capital improvements at this time affecting the base.

BASE PROCUREMENT (AFERN 4.2.4)

In addition to the payroll generated at the base, there are also contributions to the regional economy in terms of local procurements. Over the past year, 34.9% of the procurement awards have been made to the Blytheville area. Largest procurements have been for construction projects, supplies, utilities, travel, and miscellaneous services. These amounted to about \$4 million for 1975.

HOUSING (AFERN 4.2.5)

According to the 1970 Census of Housing, Mississippi County contained 19,818 housing units. In 1975 there were an estimated 19,400 year-round housing units. This number excludes the 830 units of family housing located on the base and the 996 group quarters located on base.

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

GOVERNMENT (AFERN 4.3.1)

Blytheville and Gosnell both have the mayor-council form of government. The base is located within the Chickasawla District of Mississippi County.

Matters of regional scope or importance are addressed on a regional basis by the Ozark Regional Planning District. Also, federal regions of HUD/EPA, VA, AFRCE, FAA, and A-95 Clearinghouse provide regional frameworks within which local communities can operate.

Some of the local jurisdictions with which Blytheville AFB is associated include: the Mississippi County Soil Conservation District, the Arkansas Department of Pollution Control and Ecology, and the Arkansas Highway District Number 10.

EDUCATION (AFERN 4.3.3)

Total public school enrollment for the region was 7,361. Of this amount, dependents of Blytheville AFB employees accounted for 15.5% of the total enrollment. The total PL 81-874 students number 1142. Total private school enrollment for the area is 275, with base dependents numbering 12, or 4% of the total.

MEDICAL (AFERN 4.3.4)

There are two civilian hospitals in the area with a total bed capacity of 220. One of the facilities, Chickasawla Hospital, plans to expand to 210 beds from the current 170 within two years.

The Blytheville AFB hospital has 20 beds with expansion capability to 40 beds. The base has a ten-chair dental clinic. The hospital handles over 6,000 out-patient and 110 in-patient visits per month. Retired military and their dependents account for 862 of the out-patient and 17 of the in-patient visits each month.

COMMUNITY SERVICES AND FACILITIES (AFERN 4.3.5)

The Base Security Police have informal agreements with the Arkansas and Missouri Sheriff's Department, the Arkansas and Missouri State Police, and the City of Blytheville Police Department. In the area of fire protection, the base fire department has a formal mutual aid agreement with the Blytheville and Gosnell Fire Departments.

In the area of cultural and recreational opportunities, both the base and the surrounding communities benefit from mutual interaction.

#### ACTIVITY SYSTEMS AND PLANS (AFERN 4.4)

##### TRANSPORTATION (AFERN 4.4.1)

Blytheville AFB is served by commercial air transportation through the Jonesboro Municipal and Memphis Metropolitan Airports. The base uses Memphis Metropolitan Airport for nearly 100% of its passenger movement.

There are no major rail terminals in the region. The closest major terminal is in Memphis TN, about 75 miles away. Blytheville has no rail service available for passengers, only freight.

Blytheville AFB is served by two major highways, Interstate 55 and US Highway 61. In addition, the minor roadways of Arkansas Highway 18 and several Mississippi County roads serve the area. Traffic on the above highways and roadways is generally uncongested except at peak rush hours in the vicinity of the base.

There is no rapid transit system available and none is planned.

The internal road system for the base handles traffic well. The only congestion occurs at the gates at the close of the work day.

##### UTILITIES (AFERN 4.4.2)

Various utility systems are in existence to meet the needs of Blytheville AFB. The base water supply is from artesian ground water with the current demand being 0.70 million gallons per day (mgd).

The average daily flow of sanitary wastes is 0.6 mgd. The sanitary wastewater treatment plant is of the high rate trickling filter type and has a capacity of 0.86 mgd. The effluent quality from the treatment plant is regulated by an Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES) permit. A \$2.2 million project to upgrade wastewater facilities is programmed in the FY 77 MCP to comply with 1977 standards.

Blytheville AFB purchases natural gas and fuel oil from the local communities. Natural gas is the primary heating fuel and #2 fuel oil is used for back up. Electricity is supplied to the base by the Arkansas-Missouri Power Company.

All solid waste is disposed of in an on-base sanitary landfill. The life of the landfill is considered unlimited due to the area of available land.

#### LAND USE (AFERN 4.4.3)

The land areas surrounding Blytheville AFB are primarily agricultural with sprinklings of residential areas. None of the surrounding counties have land use or development plans.

The towns of Blytheville and Gosnell are the only communities within the region that have developed studies and plans for growth. These towns formed a joint planning commission and developed a Comprehensive Planning Study in 1971. In the Blytheville-Gosnell area, about 69% of the land is used for agricultural purposes, 29% for urban use and 2% for streets. Land value for commercial or residential development is valued at between \$1500 or more per acre while agricultural land sells for between \$800 and \$1500.

Existing encroachment to the base is on the south and west border of the base on Arkansas State Highway 151. There is potential for further encroachment on the south end of the runway unless land acquisition is approved and funded.

#### AIR OPERATIONS CHARACTERISTICS (AFERN 4.5)

Blytheville AFB has established Visual Flight Rules (VFR) and Instrument Flight Rules (IFR) approaches, departures, and traffic patterns which are compatible with the types of aircraft transiting and assigned to the base. The terminal area includes the airspace within a horizontal radius of five statute miles from the geographic center of the aerodrome, extending from the ground level to 3,000 feet. Jonesboro Municipal Airport, approximately 47 miles from Blytheville AFB, is the nearest airport; therefore, the air traffic of the two fields does not conflict.

An appreciable amount of low altitude, sightseeing, light aircraft flying occurs in the Blytheville AFB vicinity. There are no natural hazards in the air space surrounding the base.

Blytheville AFB generates noise due to aircraft both in the air and on the ground. Noise from engine run ups, required to perform maintenance, is scheduled during the day to minimize the disturbance. Flight operations and possible alternatives were studied to reduce noise and safety hazards. The current operations represent the most satisfactory alternative.

### C. COMPARATIVE ANALYSIS OF VIABLE ALTERNATIVES

The candidate action (closure of Kincheloe AFB MI) and Alternatives 1 and 2 (closure of Wurtsmith AFB MI or Blytheville AFB AR, respectively) are compared with respect to principal adverse impacts in the following analysis.

#### POPULATION (AFERN 4.1.1)

Each impact area would experience a direct population loss due to the proposed action at this base. These estimated direct population losses are the sum of the military and civilian personnel to be relocated plus their dependents. Estimated losses are presented in the table below:

#### ESTIMATED LOCAL TOTAL POPULATION LOSSES

<u>Base</u>	<u>1976 Impact Area Population</u>	<u>Estimated Loss From A Closure Action Number</u>	<u>Percent</u>
Kincheloe AFB	45,500	10,400	23%
Wurtsmith AFB	26,000	9,700	37
Blytheville AFB	61,300	8,800	14

#### EMPLOYMENT (AFERN 4.2.2)

##### INDIRECT EMPLOYMENT LOSS

In response to the direct employment cutbacks there would be an indirect loss of employment. This loss would largely be felt in the civil service and trade sectors. The number of indirect job losses occurring as a result of a possible closure action at each base is presented in the following table:

#### ESTIMATED INDIRECT EMPLOYMENT LOSSES IN IMPACT AREAS

<u>Base</u>	<u>Total 1976 Civilian Employment</u>	<u>Indirect Employment Loss Number</u>	<u>Percent</u>
Kincheloe AFB	14,500	3,150	22%
Wurtsmith AFB	10,000	2,150	22
Blytheville AFB	21,500	2,950	14

Indirect employment loss estimates are based on secondary "multiplier" factors developed for each community which reflect the economic trade characteristics of each. Such indirect employment losses would contribute directly to the civilian unemployment rates in each of the impact areas. The resultant unemployment rates are presented in the table below:

ESTIMATED INCREASES IN UNEMPLOYMENT  
IN IMPACT AREAS

<u>Base</u>	<u>Estimated Increase in Unemployment</u>	<u>1975 Annual Average Unemployment Rate</u>	<u>Resultant Unemployment Rate After Action</u>
Kincheloe AFB	3,500	17.6%	38.7%
Wurtsmith AFB	2,450	17.7%	38.0%
Blytheville AFB	3,200	11.5%	24.7%

BASE PROCUREMENT (AFERN 4.2.4)

SALES LOSS

Base closure would result in direct losses in procurement/construction awards and BX/Commissary sales. The estimated total sales losses would range from \$2.1 million at Wurtsmith to \$9.8 million at Kincheloe. Estimated total direct sales losses are presented in the following table:

ESTIMATED LOCAL DIRECT SALES LOSSES, PROCUREMENT AWARDS AND BX/COMMISSARY PURCHASES (\$ 000,000)

<u>Base</u>	<u>Direct Loss in Procurement</u>	<u>Direct Loss in BX/Commissary Awards</u>	<u>Construction*</u>	<u>Estimated Total Sales Loss</u>
Kincheloe AFB	3.9	1.6	4.3	9.8
Wurtsmith AFB	0.9	.6	0.6	2.1
Blytheville AFB	1.0	1.4	1.6	4.0

\* Includes major construction projects (MCP) for which dollar amounts may fluctuate significantly from year to year.

#### HOUSING (AFERN 4.2.5)

Population losses would result in an increase in vacancy rates in private market units. The resultant vacancy rates would range from 14.4% to 39.7%--rates substantially above those considered indicative of a healthy housing market. Vacancy rates are presented in the following table:

#### ESTIMATED INCREASE IN LOCAL HOUSING VACANCY RATES

<u>Base</u>	<u>Current Housing Stock (Units)</u>	<u>Vacancy Rate (1976)</u>	<u>Estimated Increased Vacancies Number</u>	<u>Resultant Vacancy Rate</u>
Kincheloe AFB	13,620	2,820	20.7	925
Wurtsmith AFB	11,260	3,380	30.0	1000
Blytheville AFB	19,400	1,780	9.2	1,125

#### SUMMARY OF ECONOMIC IMPACT (AFERN 4.2.6)

##### ESTIMATED ECONOMIC IMPACTS

<u>BASE</u>	<u>PAYROLL LOSS (\$000,000)</u>	<u>RETAIL SALES LOSS (\$000,000)</u>	<u>DECREASE IN REGIONAL ECONOMIC OUTPUT (\$000,000)</u>	<u>PERCENT</u>
Kincheloe	36.1	19.3	45.9	28.2
Blytheville	31.7	16.9	34.3	14.0
Wurtsmith	35.2	18.8	37.3	34.4

#### INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

##### GOVERNMENT (AFERN 4.3.1)

Governmental structure in each community would be affected to the extent that governing bodies would have to adjust to losses in revenue due to losses of population and reevaluate budgets and plans.

Local forms of government administration probably would not change. Unemployment and recession would, at least temporarily, require much of the attention of administrators, planners, and elected representatives of the area.

##### EDUCATION (AFERN 4.3.3.)

###### PUBLIC SCHOOL ENROLLMENT (AFERN 4.3.3.1)

With the departure of military and civilian personnel and their dependents, there would be a resultant loss in public school enrollment. Such a loss could have direct implications for the level of funding in each school district. The following table presents the capacity, enrollment, and anticipated loss in each

of the impacted districts:

ESTIMATED DECREASES IN PUBLIC SCHOOL  
ENROLLMENT IN IMPACT AREA

<u>Base</u>	<u>Current School System Capacity</u>	<u>Enrollment Students 1975</u>	<u>% of Capacity</u>	<u>Estimated Loss in Number</u>	<u>Resultant Student Enrollment</u>	<u>% of % Capacity</u>
Kincheloe AFB	10,555	9,500	90.3	2,400	25.2	67.6
Wurtsmith AFB	5,820	5,500	94.5	1,500	27.3	68.7
Blytheville AFB	8,275	7,360	88.9	1,140	15.5	75.2

ACTIVITY SYSTEMS AND PLANS (AFERN 4.4)

TRANSPORTATION (AFERN 4.4.1)

KINCHELOE AIR FORCE BASE

Although exact data on air travel were not available, the effect of the base on the City-County Airport of Sault Ste. Marie CN may be substantial since over 30% of Chippewa County's population is directly related to the base and numerous commercial businesses are base contractors. Railroad business would be minimally affected since no passenger service exists and only 1% of the Soo Line Railroad yearly business is base-related. The existing highway system in the area surrounding Kincheloe is considered adequate; plans to upgrade the quality of roads have no direct relationship to the base. Bus service out of the Sault Ste. Marie terminal would be greatly reduced since Kincheloe AFB accounts for about 39% of the passenger and 33% of the freight service. The St. Ignace Bus Depot would lose about 10% of its monthly business.

WURTSMITH AIR FORCE BASE

Loss of revenues to the Tri-City Airport 90 miles south, may be relatively significant, as 810 passengers are processed annually through the base, and 4,458 freight shipments are also

made. Loss of this business may alter services to and from the area. Rail shipments to Wurtsmith AFB are limited to rather substantial petroleum shipments. A closure of the base would affect revenues of the D&M Railroad Company, but this impact has not yet been quantified.

Traffic on the roads surrounding Wurtsmith AFB is often severely congested during peak rush hours. Plans to construct additional highway lanes to alleviate this problem may be affected by a base closure action. Approximately half of the vehicles registered at Wurtsmith AFB are owned by personnel residing off base.

#### BLYTHEVILLE AIR FORCE BASE

Plans for two highway improvement projects developed by state and local agencies would be affected by a base closure. An ongoing project to widen County Highway 151 between Gates 1 and 3 near the base may, depending on the extent of completion, be reevaluated and possibly adjusted in scope. Data are presently lacking on the precise status of this project. Similarly, revised projections of future traffic loadings at the junction of State Highway 18 and US Highway 61 east of Blytheville AFB, presently a problem area, may indicate that planned improvement projects in this location are less needed. Total traffic volume in the Blytheville AFB area during peak periods would be reduced approximately 30%. Future commercial airline service to Blytheville Municipal Airport would be much more difficult for the community to obtain.

#### UTILITIES (AFERN 4.4.2)

#### CIVILIAN COMMUNITY UTILITIES (AFERN 4.4.2.1)

#### KINCHELOE AIR FORCE BASE

The Edison Sault Electric Company would lose approximately \$300,000 per year (on-base use) if Kincheloe AFB closes. Michigan Consolidated Gas Company would lose approximately \$280,000 annually from base contracts. Michigan Bell Company and General Telephone Company would both lose revenues from on- and off-base use; Michigan Bell Company would lose an estimated \$9,000/month due to loss of official on-base use alone. Implementation of the candidate action would decrease utility demand in the region by approximately 21%.

#### WURTSMITH AIR FORCE BASE

Combined demand by on-base and off-base users of electrical power totals over three-fourths of the current demand in the Oscoda and Au Sable townships. Off-base gas users account for approximately one-sixth of the demand in the area. Telephone service to both on- and off-base users is approximately one-fifth of the current demand.

Implementation should decrease utility demand in Iosco County by approximately 38%.

#### BLYTHEVILLE AIR FORCE BASE

Use of electrical service by on- and off-base users is small compared to overall power production and distribution by the Arkansas-Missouri Power Company. However, this company would lose approximately \$264,000 in annual revenues from base purchases. While natural gas is in very short supply in this region, the amount consumed by on-base and off-base users would not increase local supplies more than 4%. Annual base purchase of natural gas has been estimated at \$210,400. These revenues would be readily regained from other potential users.

#### LAND USE (AFERN 4.4.3)

#### KINCHELOE AIR FORCE BASE

Since over 77% of the land in the counties surrounding Kincheloe AFB is forest, a base closure would not significantly change regional land use patterns. The majority of the land surrounding the base is federal and state-owned forestland so the ownership of the land should not be altered due to base closure. However, privately-owned lands can be expected to decrease in value by as much as 30% in Chippewa County. Since no future development plans have been organized for the area, any future plans would have to take into account the loss of population due to the closure of the base.

#### WURTSMITH AIR FORCE BASE

The area surrounding Wurtsmith AFB is recreationally oriented with a considerable portion of recreational housing. A closure of Wurtsmith would eliminate the main industrial sector of the local economy and impact on its attendant residential development.

#### BLYTHEVILLE AIR FORCE BASE

Growth rates of residential areas, especially north Blytheville east of US Highway 61 and also in Gosnell north of the existing school complex, would slow during the transition period following a base closure. Automotive commercial use of land near the base and along access roads would also decrease. The ownership of these same lands would be relatively unstable during this period, and market values would decline.

Existing development plans for the Blytheville-Gosnell area recommend several facility needs be met during the planning period. The need for these facilities would have to be reconsidered in light of population losses due to a base closure, particularly in Gosnell.

In general, the economic base of the Blytheville AFB region is sufficiently diverse to absorb over time the socio-economic losses associated with a closing of the base. Future land use in Gosnell would depend to a large extent on future use of base lands and facilities. The change of residential and commercial use of land near the base would probably be the most significant land use impact of a base closure action.

#### SPECIAL AREAS (AFERN 4.4.3.7)

There are no adverse impacts on any sites of historical/archeological significance under the candidate or alternative actions.

## SUMMARY

The following matrix summarizes some of the major areas of consideration for ease of comparison. Air pollution, water/sewage, and biotic environment are included in the Natural Environment category. Payroll amounts in the table reflect the spendable income taken from payroll tapes of the Air Force Accounting and Finance Center. Army and Air Force Exchange Service (AAFES), Nonappropriated Fund (NAF) and contractor personnel are not included in the amounts shown in the table.

## COMPARISON SUMMARY

<u>CONSIDERATIONS</u>	<u>KINCHELOE AFB (CANDIDATE)</u>	<u>WURTSMITH AFB (ALTERNATIVE)</u>	<u>BLYTHEVILLE AFB (ALTERNATIVE)</u>
Strategic Location	Good	Good	Good
Capital Investment (\$ million)	72.8	90.1	53.7
Annual Payroll <sup>1</sup> (\$ million)	36.1	35.2	31.7
Air Traffic	Good	Good	Good
Weather Cancel- lation Rate	5.9%	3.2%	0.6%
Natural Environment	Good	Good	Good
AICUZ/Noise	Good	Good	Good
Resultant Off-Base Housing Vacancy Rate	28%	40%	15%
Resultant Unemployment Rate	38.7%	38.0%	24.7%
Resultant Loss in School Enrollment	25.2%	27.3 %	15.5%
Annual Cost Avoid- ance After FY 79 (\$ million)	22.2	22.3	20.0

1/ Payroll amounts reflect take home pay of military and DAF civilian personnel.

V. PROBABLE ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED SHOULD THE PROPOSAL BE IMPLEMENTED

This section of the report contains a brief summary of those probable impacts identified as adverse and unavoidable with implementation of the candidate action. All of these impacts have been estimated based on the "worst possible" case and are summarized by major functional categories. The general course of the economic repercussions of a base closure in a local economy is traced in the paragraphs below, followed by a detailed discussion of impacts.

Upon closure of a major military installation, the direct loss of jobs, personal income, and procurements would lead to secondary job losses in all sectors of the local economy. As these job losses take place, they would create their own cycle of indirect job losses in a continuing cyclical process until the economy stabilizes. Experience with closure of other military installations indicates that this process takes from six months to one year before an upswing is felt in the local economy. The period varies, of course, depending on the state of the local economy at the time of closure, the time phasing of the action, and the mitigating measures adopted.

As base operations wind down, businesses which provide services to the base, its personnel, and its dependents would find that a large portion of their market was gone and may be forced to close. As more people become unemployed and opportunities for employment in the area decrease, households may begin to leave the area in search of new opportunities. This loss in population would cause further decrease in demand for services and possibly further unemployment.

In conjunction with the loss of employment, the area would experience a decrease in total personal income, associated with a decrease in spending power. This would be an additional constraint on local businessmen and would reduce the number of people able to buy homes.

The housing market, already strongly impacted by a high vacancy rate and depressed market values due to lack of demand, may be further impacted by the additional losses

of population in the area. As bank deposits are withdrawn by Kincheloe AFB personnel and other households leaving the area, less mortgage money would become available to prospective purchasers, and some present mortgages may have to be foreclosed, further impacting the housing market.

As people leave the impact area, the demand for public services, and therefore user charge revenues, would decline, although the cost infrastructure would still be present. This could entail deficit spending at the local government level or an increase in user charges for the remaining population. Other local government revenues may also be affected, including property tax revenues.

Educational facilities would be impacted by the loss in population which would lead to reductions in state operating aid distributed on a per capita basis. Private educational institutions may find that decreased tuition collections cannot support the present variety of programs they offer and may have to cut these back. Cutbacks in both private and public education would lead to the dismissal of teachers, another contributing factor to high unemployment.

#### A. KINCHELOE AIR FORCE BASE AREA

##### ON-BASE EMPLOYMENT LOSSES

The direct loss of 3300 military and 900 civilian personnel and their dependents would have an immediate effect on the local economy and would induce other indirect effects.

##### REDUCTION OF LOCAL ECONOMIC ACTIVITY AND BUSINESS VOLUMES

An indirect employment loss would occur due to the candidate action. This employment loss would contribute significantly to the civilian unemployment rate over the short term, increasing it from approximately 18% to 38%. The unemployment rate may be even higher during the winter months, due to the seasonal nature of the economy. Major employment losses can be expected to occur in the retail trade and services sectors.

The candidate action would result in the direct loss of population and payroll income as well as an indirect loss of personal income. Overall population loss is estimated at over 23%.

The loss of base procurement awards, worth almost \$10 million to the local economy, would adversely effect those businesses which have been specifically developed to serve the military establishment in the region.

Although a large portion of military retail sales is made on base, local retailers would experience a direct loss in sales due to the departure of Kincheloe personnel and their families.

Many small retailers in the area may be forced out of business by the reduction in retail sales and disposable income. Past experience with base closures has shown that retailers engaged in the sale of shoppers goods are most affected by a large-scale withdrawal.

There would be a loss of bank deposits due to both direct and indirect employment losses. This may result in a lack of funds for new mortgages on the part of local lending institutions, or, in the worst case, could lead to mortgage foreclosures as bank obligations become due.

#### REDUCTION OF PUBLIC REVENUES

The school districts of Brimley, Pickford, Rudyard, and Sault Ste. Marie would experience a 10% decline each year, for three years following closure, in the amount of Federal Impact Aid funds they receive. Aid entitlement based on lost enrollment would then cease completely. In addition, there would be substantial reductions in State operating aid to schools.

Local governmental units in the communities surrounding the base would suffer reductions in revenues and manpower as a result of the population loss. The broad socio-economic changes which the candidate action would create would alter past planning assumptions for local and regional agencies. New goals and directions would be necessary, particularly for economic recovery measures in Sault Ste. Marie. Many of the community service programs directed or sponsored by the local governments would lose valuable leadership provided by the Kincheloe AFB personnel and their dependents.

A reduction in public utility revenues would occur as a result of decreased usage and could result in increased user charges to the remaining population. Reduced user charge revenues may jeopardize payback schedules for outstanding revenue bonds issued to finance the construction of public utilities.

There would be a slight reduction in revenue-sharing funds in Chippewa County due to decreased population and changes in per capita income.

#### DISTRIBUTION OF PUBLIC SERVICE PATTERNS

The elimination of services which are cooperatively provided (such as medical, police, fire, and air traffic control) may necessitate increased public sector investment to insure these services remain available to the local population. The reduction in demand for public utilities may prohibit extension of these services to remote areas of the impact area, depriving that population of these beneficial services.

The primary adverse impact on off-base transportation facilities would be the loss of air passenger traffic and freight revenues at the City-County Airport. A significant loss of revenue would be incurred by the Eastern Upper Peninsula Transportation Authority which manages the bus terminal in Sault Ste. Marie.

Primary adverse effect on the supply of utility services to civilian communities would be losses in revenues to the utility companies, particularly the Edison Sault Electric Company, Michigan Consolidated Gas Company, and the Michigan Bell Telephone and General Telephone Companies.

#### DISRUPTION OF REAL ESTATE MARKETS

There would be an increase in private housing market vacancies, particularly over the short run. This may result in the reduction of housing market values, particularly as supply will

far exceed demand in Chippewa and Mackinac counties, which would have an aggregate vacancy rate of 27.5%.

Existing transient lodging facilities may experience a decrease in patronage due to the candidate closure, particularly as a portion of current tourism in the area is attributable directly to visiting families of servicemen.

Primary adverse unavoidable impacts over the short term would be the residential and commercial housing vacancies and associated land ownership turnover and land value fluctuations. These adverse impacts would affect primarily Sault Ste. Marie and Kinross.

#### B. AVAILABLE MITIGATING ACTIONS

Based on the preceding analyses of anticipated potential adverse impacts five major impact categories have been identified. These impact categories include:

1. On-Base Employment Losses
2. Reduction of Local Economic Activity and Business Volumes
3. Reduction of Public Revenues
4. Disruption of Public Service Patterns
5. Disruption of Real Estate Markets

Within each of these major categories is a number of more specific impacts, as shown in the mitigation matrix. These adverse impacts can be partially mitigated by regional and community economic development projects which would generate employment opportunities and help stabilize the area's economy. Such projects would likely focus on the leisure-recreation industry.

The President's Economic Adjustment Committee (EAC) has been charged with helping communities and individuals affected by changes in Defense programs. Assistance is provided to help communities reduce their

dependence on Defense activities and to make necessary adjustments when program changes cause serious impacts. EAC is chaired by the Secretary of Defense and has members from all Cabinet departments (except State and Treasury) and six major federal agencies. The permanent management/administrative staff of the Committee is located in the Defense Office of Economic Adjustment (DEA).

The role of the Economic Adjustment Committee is to help a community help itself in making necessary adjustments. It does this by bringing a coordinated Federal response that is in concert with the goals and objectives of community leaders. The intent of the economic adjustment program is to utilize state and local resources. Since 1970, EAC has assisted 136 communities in 40 states and Puerto Rico to diversify their economies and reduce their dependence on Defense employment.

Prior to the establishment of the Committee in 1970, the program operated largely within the Department of Defense as the Defense Economic Adjustment Program. During the Program's 15-year history, the Department of the Air Force took an active and supportive role.

With the closure of 38 air bases and stations during this period, resulting in the loss of 39,900 Air Force civilian jobs, Air Force officials aided the DOD Office of Economic Adjustment (OEA) and the impacted communities by creating 41,900 civilian jobs in impacted areas. Civilian airfields were established at 25 former air bases, and college or vocational training institutes were established at 26 former facilities.

Because the activities of the EAC are tailored to the unique needs and resources of the affected communities and because the affected communities must request the assistance, the specific mitigation steps to be taken cannot be identified at this point; but, it should be noted that this mitigation opportunity does exist. It should also be noted that if the OEA were asked for assistance, their response time should be shortened as a result of the environmental analysis process.

A thorough review of Federal programs available to mitigate adverse impacts was undertaken. Reviews of case histories and documents published by and for the President's Economic Adjustment Committee (EAC) defined courses of action available to impacted communities. A matrix was then developed which outlined the basic, well-known programs available to mitigate adverse impacts

of base closures and assist in local economic recovery. The matrix, identifies major (and specific) impacts with corresponding mitigation programs available.

The following matrix serves as a master guide for mitigative techniques. Although impacts may vary in magnitude, this matrix should serve as the source of all applicable mitigative techniques presently available.

MATRIX OF AVAILABLE MITIGATIVE PROGRAMS/ACTIONS RELATED TO  
POTENTIAL UNAVOIDABLE ADVERSE IMPACTS

Community Impact		Level of Program and Nature of Mitigation		
		Federal	State	Local
<b>I.</b>	<b>On-Base Employment Losses</b>			
A.	Military	<ol style="list-style-type: none"> <li>1. Staged reductions by DOD</li> <li>2. Transfer by DOD</li> <li>3. New facility establishment by DOD</li> </ol>		
B.	Civilian	<ol style="list-style-type: none"> <li>1. Staged reductions by DOD</li> <li>2. Priority placement program</li> <li>3. Retirements</li> </ol>		
II.	Reduction of Local Economic Activity and Business Volumes			
A.	Loss of Employment Sector	<ol style="list-style-type: none"> <li>1. EDA-Public Works and Econ. Dev. Act of 1965 (PL 89-136)           <ul style="list-style-type: none"> <li>- Technical assistance, demonstration grants</li> <li>- Planning grants</li> <li>- Public grants/loans - 50-80% of cost</li> <li>- Private loans/guarantees - up to 65% of cost</li> </ul> </li> <li>2. HUD-Community Development Block Grants</li> <li>3. SBA-Section 502 loans</li> <li>4. Community development funds (Sections 105 &amp; 107, "HUCD Act" - 1974)</li> </ol>	<ol style="list-style-type: none"> <li>1. "Freeport" tax breaks</li> <li>2. State industrial loans and guarantees</li> <li>3. State development credit corporations</li> </ol>	<ol style="list-style-type: none"> <li>1. Establishment of development commission or authority with revenue bonding authority</li> <li>2. SBIC's-EDA and SBA grants</li> <li>3. LIDC's-EAC grants</li> <li>4. Local property tax breaks</li> </ol>
B.	Loss of Population, Payroll and Income	<ol style="list-style-type: none"> <li>1. Staged reductions by DOD</li> <li>2. New facility establishment by DOD</li> </ol>	SBA-Section 502 loans and base closing economic injury loans	Chamber of Commerce actions
C.	Loss of Personal Expenditures			Securing private industry to generate greater levels of spending and local procurement
D.	Loss of Procurement Expenditures		Determined at national level	Local procurement
E.	Retail Trade		Not significant unless job reductions are 15 percent of region employment base	Realignment of retail centers and zoning constraints

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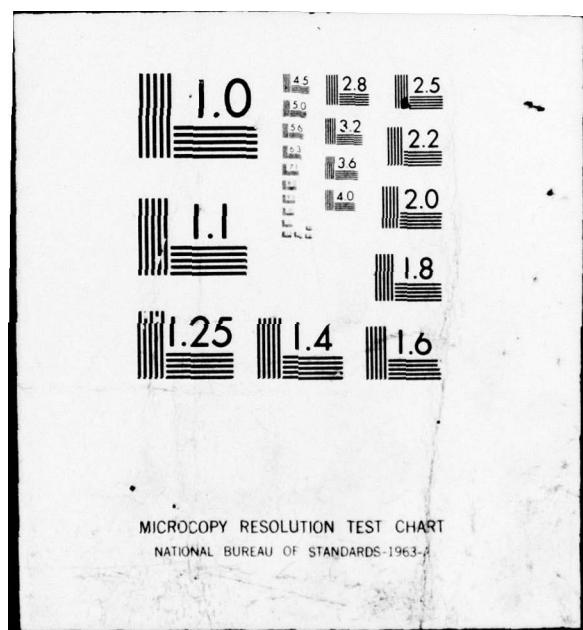
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MATRIX OF AVAILABLE MITIGATIVE PROGRAMS/ACTIONS RELATED TO  
POTENTIAL UNAVOIDABLE ADVERSE IMPACTS (con't)

Community Impact	Level of Program and Nature of Mitigation		
	Federal	State	Local
F. Base-Related Services (small business)	SBA-displaced business loans (PL 93-237, Section 37(b)(7) "base closing economic injury loans")		SBIC's to consolidate and distribute credit to small businesses
G. Bank Deposits and Loans	1. FDIC and FSLIC (insurance only) 2. DOD homeowners assistance program 3. FILA & VA mortgage forebearance		Bank mortgage forebearance
H. Secondary Employment Reductions AND	1. Public Works and Economic Dev. Act. of 1965 (PL 93-423) (PL 89-136) Title IX "Special economic and adjustment program" Title X "Anti Recessionary job opportunities program"	1. Provision of job training and retraining facilities (DIR) 2. University sponsored training programs & Vo-tech education	
I. Higher Un- and Underemployment	2. Manpower Dev. and Training Act of 1962 (Section 204(a) PL 87-415) - National on-the-job training - Manpower revenue sharing 3. Vocational Education Amendments of 1968 (Title I, Part B PL 90-576)		
J. Loss of Employed Base-Related Dependents	Flexibility of staging and timing of base closing	Civilian only lost -- not recoverable	Local job training and adjustment, where applicable
III. Reduction of Public Revenues (State and Local)	A. Income Taxes	Not lost	Not applicable
	B. Personal Property Taxes	1. DOD Homeowners Assistance Program 2. GSA release of excess property to community	Higher assessments or tax rates
	C. Sales Taxes	Not significant (See III.A.)	
	D. Gasoline Sales Taxes	Not recoverable	
	E. Utilities' User Charges (ability to pay back revenue bonds)	1. EPA cost recovery? 2. EDA and EPA-larger percent federal grants	Public service commission - rate increases Higher user charges

MATRIX OF AVAILABLE MITIGATIVE PROGRAMS/ACTIONS RELATED TO  
POTENTIAL UNAVOIDABLE ADVERSE IMPACTS (con't)

<u>Community Impact</u>	Level of Program and Nature of Mitigation		
	<u>Federal</u>	<u>State</u>	<u>Local</u>
<b>F. Revenue-Sharing Funds</b>			Annexation, if possible and practical
<b>G. School System Funds for Children of Base Dependents</b>	PL 81-874-90% of previous level for children of base residents for three succeeding fiscal years		
<b>IV. Disruption of Public Service Patterns</b>			
<b>A. Existing and Planned Utilities Improvements</b>	<p>1. EDA-Public Works and Economic Dev. Act (1965 PL 93-423) (PL 89-136) Title IX</p> <ul style="list-style-type: none"> <li>- Technical assistance, demonstration grants</li> <li>- Planning grants</li> </ul> <p>2. EPA-PL 92-500 Title II</p>	Increased state contribution	Industrial development bonds
<b>B. Educational Facilities Utilization</b>	<p>1. See IV.G. (1) Vocational Education Amendments of 1968 (Title I, Part B, PL 90-576)</p> <p>2. 100% discount on conveyance of base property to be reused for education (Section 203(k)(1)), Federal Property and Admin. Serv. Act of 1949</p> <p>3. 100% discount on conveyance of base property for reuse of hospital/medical facility - Federal Property and Admin. Serv. Act of 1949 (Section 203(k))</p>	Reuse via sales/lease of excess facilities for other public or private purpose	Acquisition of base facilities through revenue bonds, if necessary, or grants, if available
<b>C. Loss of Health and Medical Facilities</b>	100% discount on conveyance of base property for reuse of hospital/medical facility - Federal Property and Admin. Serv. Act of 1949 (Section 203(k))	Acquisition of base facilities through revenue bonds, if necessary, or grants, if available	Acquisition of base facilities through revenue bonds, if necessary, or grants, if available
<b>D. Loss of Air Service Infrastructure</b>	<p>1. FAA-100% discount on conveyance of base property for general aviation reuse (Section 13, Surplus Property Act of 1944)</p> <p>2. Same as V.C. (1)</p>		
<b>E. Loss of Public Recreation Facilities</b>	50% discount on conveyance of base property to be reused for parks and recreation - DOI - Surplus Property Act of 1944, Section 13(h)	Acquisition of base facilities through revenue bonds, if necessary, or grants, if available	Acquisition of base facilities through revenue bonds, if necessary, or grants, if available

MATRIX OF AVAILABLE MITIGATIVE PROGRAMS/ACTIONS RELATED TO  
POTENTIAL UNAVOIDABLE ADVERSE IMPACTS (con't)

Community Impact	Level of Program and Nature of Mitigation		
	Federal	State	Local
V. Disruption of Real Estate Markets			
A. Increased Vacancy in Housing Market and Loss of Market Value	<ul style="list-style-type: none"> <li>1. DOD Homeowners Assistance Program insures at least 90% of market value</li> <li>2. DOD-protection and maintenance contracts</li> <li>3. Staged reductions of base emp.</li> <li>4. IUD funding for public housing</li> </ul>	<ul style="list-style-type: none"> <li>1. Bank mortgage forbearance</li> <li>2. Building moratoria</li> <li>3. Purchase of base housing for public housing - IUD monies via "National Housing Act" 1968 PL 90-448, S.C. 235(j) "U.S. Housing Act of 1937" PL 75-412 (local housing authority)</li> </ul>	<ul style="list-style-type: none"> <li>1. Local industrial development bonds</li> <li>2. "Special" tax bonds on new development</li> <li>3. SBIC's</li> </ul>
B. Reduction of Retail Sales	See III.A.		
C. Reduced Motel Occupancies	EDA planning grants to evaluate and promote viable tourism or lodging-related industries	<ul style="list-style-type: none"> <li>1. EDA-loans and guarantees to aid businesses to establish where other lenders won't venture (PL 89-136) P.W. &amp; Econ. Dev. Act. of 1965</li> </ul>	<ul style="list-style-type: none"> <li>1. "Freeport" tax incentives</li> <li>2. State loan guarantees</li> <li>3. State development credit corporation</li> </ul>
D. Reduced Private Investor Interest		<ul style="list-style-type: none"> <li>2. Same source - public development grants</li> </ul>	<ul style="list-style-type: none"> <li>1. Local industrial development bonds</li> <li>2. "Special" tax bonds on new development</li> <li>3. SBIC's</li> </ul>

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VI. RELATIONSHIPS BETWEEN LOCAL SHORT-TERM USE OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

This section contains a brief discussion of the extent to which the candidate action involves trade-offs between short-term environmental gains/losses and the expense of long-term losses/gains and the extent to which the candidate action forecloses future options.

In the short term the Air Force will be able to close one base with a reduction of excess capacity and resultant savings in manpower and dollar.

There are some conditions or situations anticipated as a result of the candidate action that would appear to represent improvements in the short run but which may prove detrimental when considered over the long term, including:

The reduced enrollment at various public schools, accompanied by the continued provisions of PL 874 funds at a slightly reduced level for three years following closure, would result in an enhanced educational environment in the short-term period due to more favorable funds/student ratios. However, it should be remembered that PL 874 funds would be discontinued after three years. It is uncertain whether student population adjustments could be made in such a way as to reduce total operating costs fully in proportion to loss of federal and state aid.

Reduced local governmental expenditures that are variable with population demands would probably not be offset by significantly reduced tax revenues.

Reduced demand for public utilities would provide excess capacity for furthering other economic development efforts; but too severe or extended a reduction of user-charge revenues could endanger the local area's ability to meet construction cost repayment schedules or provide expanded service.

On the other hand, there are potential conditions that might exist as a result of the candidate action that would be detrimental in the short run, but which could prove advantageous in the long run, including:

Reduced revenues and demands on public facilities, resulting in excess capacity, could prove advantageous in attracting a major new industry or industrial park developer.

The loss of jobs and reduction in the area's total personal income would probably severely depress the local economy in the short term, but a large available skilled labor pool may prove advantageous in attracting new industry and economic generators over the long term; and these new employees could be much more stable and less subject to cutbacks than the base may prove to be.

The loss of the base facilities and activities may create many short-term difficulties; but the imminent availability of the land itself would provide many opportunities for construction or development of much-needed or long-sought community facilities, such as an airport, hospital, community college, park land, or industrial park.

High housing vacancy rates and low market values would create difficulties in the short term for civilians in the local area trying to sell their homes; but in the long term these factors may contribute to a healthier housing market. Existing substandard housing would probably be demolished when no buyers could be found, reducing vacancy rates and raising market values in the long run. In addition, if effective mitigating measures are adopted and the local area gets economic impetus from new industries or other sources, housing would be available for in-migrating populations.

Based on past experience with closures/reductions, local leaders and the President's Economic Adjustment Committee working together have been able to reduce and, in many cases, eliminate the adverse socio-economic impacts of base closure/reduction.

The candidate action does not foreclose future options for the land use of the base or surrounding areas.

VII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES  
THAT WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT  
BE IMPLEMENTED

If the candidate action at Kincheloe AFB is implemented, certain expenditures of capital, materials, manpower, and time which have been made or committed may be irretrievable. Such irreversible and irretrievable expenditures of resources, which occurred while Kincheloe AFB was in operation and which represent resources that would become ineffectively utilized or lost to local governments and citizens of the impact region, are highlighted below.

Because of the cooperative agreements in existence between Kincheloe AFB and the surrounding communities, post-action investments may have to be made by the impacted communities. Such investments may take the form of increased capital outlays for those services directly impacted by the proposed action. Such services include medical services, fire protection, and police protection.

Capital investments by the local government for support services and facilities related to the base presence would become under-utilized. The same would be true of business investments developed in response to the existing demand.

Those services developed specifically in response to the military presence in the region would be lost through closure or transfer.

VIII. CONSIDERATIONS THAT OFFSET THE ADVERSE ENVIRONMENTAL EFFECTS

The Air Force has determined that the candidate action would reduce excess basing capacity and result in substantial resource savings without detriment to combat capability. Thus, the Congressional direction to reduce support activities would be followed and significant manpower and dollar savings achieved.

Resultant cost savings are indicated in the following analysis: (\$000)

	FY 77 After Action	FY 78	FY 79	FY 80
Annual Cost Avoidance		\$18,024	\$20,382	\$22,415
Recurring Costs		\$ 249	\$ 249	\$ 249
One-Time Costs		\$7,656	\$3,681	
Net Cost Avoidance or (Cost)		(\$7,656)	\$14,094	\$20,133 \$22,166

**IX. DETAILS OF UNRESOLVED ISSUES**

**KINCHELOE AIR FORCE BASE AREA**

The long-term use of the lands and facilities of the base is presently unresolved.

The effects of the candidate action on value and ownership of specific parcels of land cannot be determined.

X. BIBLIOGRAPHIC REFERENCES:

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LAND USE SPECIAL STUDIES

Midwest Research Institute

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Loring AFB ME  
Blytheville AFB AR

HUMAN ENVIRONMENT SPECIAL STUDIES

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